



EcoPinion

Consumer Cents for Smart Grid

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Introduction

EcoAlign, a strategic marketing agency focused on energy and the environment, conducted 1,000 online interviews in April 2011. The sample was balanced to match the U.S. population by age, gender, region and ethnicity. EcoAlign conducted the survey in conjunction with Clasma as an input into ConnectivityWeek 2011. Clasma provided input on the survey instrument and top line analysis.

The primary objective for this twelfth EcoPinion Survey Report was to test consumer perceptions and attitudes in regard to smart grid. A similar EcoPinion consumer survey (EcoPinion No. 8) was conducted in 2010 and some of this year's questions remained the same as last year's to gauge changes to levels of awareness and acceptance. New questions examine specific issues such as the impacts on health, possible consumer service benefits and delivery of those benefits via smart grid.

Since last year's survey was conducted, millions more "smart meters" have been deployed across the nation. These two-way communication devices will allow information to be passed between consumers and energy providers, and enable consumers to see their energy consumption in real-time or close to it.

In addition, the customer-facing support systems, programs, new products and applications have begun to be put in place by utilities and other energy suppliers to leverage smart grid capabilities. Prepay is a good example of a new bill-pay option introduced to the electric sector that uses real-time consumption data enabled by smart grid. Our prior research indicates that many consumers will like this option.

Despite the fact that much has occurred with smart grid deployments and applications on the operational side over the past year, the 2011 EcoPinion findings point to the fact that customer awareness has barely budged over



the past year, with 35 percent of Americans being aware of the phrase “smart grid” in 2011 compared to 31 percent in 2010.

Moreover, when asked for the first word that came to mind when thinking about “smart grid”, consumers generally had a largely functional (non-emotional) response. The most commonly mentioned (by far) was “electricity.” Other words and ideas were mentioned at much lower levels, and include “resource management,” “intelligent,” “efficient,” “energy,” “computer,” “energy efficient,” “tracks usage,” “technology,” and “green.”

Smart grid, for many Americans, remains an empty vessel that is yet to be filled with any value or significance.

What then has changed over the course of a year? What do the 2011 findings tell us about current consumer attitudes and perceptions of smart grid? What are the opportunities and challenges in 2011?

Opportunity: The opportunity presented in 2010 remains largely the same in 2011. Consumers are generally unaware of the impact of smart grid but like the concept. Therefore, the opportunity remains to shape consumer perceptions in a positive manner.

A key extension of the opportunity in 2011, however, is that consumers seem much more receptive to and would welcome higher levels of engagement with their electricity suppliers. In short, they are looking for help to manage their bills, but more broadly are looking for alternatives to traditional service, offerings and customer service options, specifically around bill pay and energy management. Findings that point to this opportunity for greater engagement include:

- ❖ 87 percent of Americans indicated that they would like utilities to suggest ways for consumers to reduce their bills.
- ❖ Respondents were told that smart grid will allow them to review their own energy consumption in detail. As a result, consumers will have new options in regard to billing options, payment plans and taking advantage or promotions and/or incentives. When asked how appealing this was, 56 percent of Americans found this prospect to be “extremely appealing” or “very appealing.” Another 33 percent found it to be “appealing.”
- ❖ 56 percent of Americans believe smart grid will either “greatly improve” or “improve” the customer experience and customer service.



The opportunity in 2011 challenges the traditional notion that consumers prefer to “set it and forget it” and are not interested in building relationships with their electricity suppliers. Smart grid could represent the enabling platform to build towards greater customer engagement.

Challenge No. 1: Americans continue to find the concept of smart grid to be appealing in the abstract. Yet, as the title of this report implies, consumers have strong and specific expectations that smart grid will save them money and help them manage energy consumption better. If anything, this focus on dollars and cents has strengthened over the past year.

Why the laser-like focus on cost? A primary reason is that more consumers in 2011 were extremely concerned or very concerned about the potential for rising utility bills – 78 percent in 2011 as compared to 74 percent in 2010. This concern was highest among women (49 percent v. 41 percent of men), older consumers (52 percent of those ages 55+ compared to 43 percent of those ages 18-54 years) and those who own their own homes (49 percent v. 40 percent of renters).

Thus, the challenge will be for utilities and energy suppliers to meet these strong expectations that smart grid will lead to short-term savings and better energy management options, especially given that utility rates are in fact increasing and will continue to increase.

Other 2011 findings that point to the challenge include:

- ❖ In terms of attitudes towards their personal energy consumption, the most frequently chosen statement was “I am most concerned with saving money on my utility bill” (43 percent). All other statements were chosen by fewer than 20 percent of these adults. Again, women (48 percent v. 38 percent of men) and older respondents (50 percent v. 41 percent of younger Americans) were most likely to feel this way.
- ❖ In terms of top benefits to be delivered by smart grid soon after deployment, consumers were most likely to mention lowering their bills (41 percent), allowing them to analyze their energy consumption and make energy management decisions based on that information (38 percent), and decreasing their electricity consumption (34 percent).
- ❖ Among those who would like to receive suggestions from their utility company in terms of how to reduce their bill, they felt that in the short term smart grid would be most likely to help improve their utility's



service by providing better billing and energy consumption information (34 percent) and more energy management options (30 percent).

Challenge No. 2: There are a growing number of messengers and messages being put out to consumers by various stakeholders. This, in turn, is creating a lot of noise in the market, not only about smart grid, but the broader concept of what is meant by “smart,” with smart phones, smart cars, etc. The challenge will be to clearly communicate information that is pertinent and desired by consumers directly connected to smart grid and the customer-facing options enabled by smart grid.

EcoPinion No. 12 tested what kind of information about or from smart grid would be most valuable to consumers.

- ❖ Eight out of ten thought it would be extremely or very valuable to find out how the smart grid would impact their bill, new pricing options that would give them the opportunity to save money, and what the smart grid would cost.
- ❖ Seven out of ten found it valuable to get information about the mechanics of this technology, specifically policies around privacy and security of personal data, how the smart grid works, if they can opt out of being connected to the smart grid, and education about other things they can do with it in the future that they cannot do now.

Many of the messages are increasingly being driven by real or perceived consumer concerns about smart grid. In California, for example, there has been vocal criticism of smart grid in regard to consumer protection/privacy and potential negative health impacts. We decided to test the resonance of these concerns – privacy and health – directly in this year’s EcoPinion.

- ❖ Consumer protection/privacy: When consumers were asked to use one word to describe their biggest concern relative to smart grid, they indicated their top concerns included “privacy,” “control/loss of control,” “security,” and even fear of “big brother.” Moreover, when asked who should have access to their detailed energy consumption data, 65 percent of Americans responded “only the customer.” Clearly, consumer protection and privacy issues are very real concerns that must be addressed.
- ❖ Health impacts: In California, some critics of smart grid have claimed that smart grid could result in negative health impacts. Americans, however, believe the opposite. Almost half of all Americans (49 percent) believe that smart grid will be a net positive on health and another 44 percent believe that any health impact of smart grid will be



balanced. Why? Because there is a recognition that smart grid could be very beneficial to air quality through more efficient use of energy and/ or bringing more renewable energy online.

Challenge No. 3: In 2010, EcoAlign posited that a challenge would be to align smart grid with smart customer service and delivery. We stated:

Insofar as smart grid represents a two-way communication platform, interlinking devices, the grid and consumers to form a mesh of personal preferences and value, consumers have a reasonable expectation that communications coming to them from this platform will also be "smart." Yet the current ability of utilities and energy suppliers to deliver and communicate the way consumers increasingly prefer is oftentimes limited by back office infrastructure, and as importantly, by an industry culture that has not had to be consumer-focused for decades.

This challenge remains the same in 2011. As stated in an earlier finding above, a majority of consumers expect that smart grid will lead to greatly improved/improved customer service and experience.

It bears repeating what was said in 2010: From a customer perspective, there will be "very little that is smart" about smart grid if consumer preferences are not aligned with communication and transactional channels enabled by the supplier, and if customer service and delivery are poor.

Other top line findings from EcoPinion No. 12 include:

- ❖ While one fourth of consumers would allow the utility to control their high-use appliances automatically, another quarter would like notifications so they can make the adjustments themselves. An additional one third expressed willingness if the price paid was sufficient, while only 16 percent said they would never allow this. This suggests tremendous potential for dynamic pricing and demand response programs as long as people can choose arrangements that suit them. There is an opportunity for more engagement around this option. How the adjustments will be done and by whom will be important in regard to messaging.
- ❖ Email (chosen by 54 percent of respondents) and mail (51 percent) are the preferred methods of communication with their utility and energy supplier.

Initial Reaction and Awareness: “Smart Grid”

The first two survey questions preceded the formal definition of smart grid. When asked for the first word that came to mind when thinking about smart grid, consumers generally had a largely functional (non-emotional) response. The most commonly mentioned (by far) was “electricity.” Other words and ideas were mentioned at much lower levels, and include “resource management,” “intelligent,” “efficient,” “energy,” “computer,” “energy efficient,” “tracks usage,” “technology,” and “green.”

First Word That Comes to Mind for “Smart Grid”¹

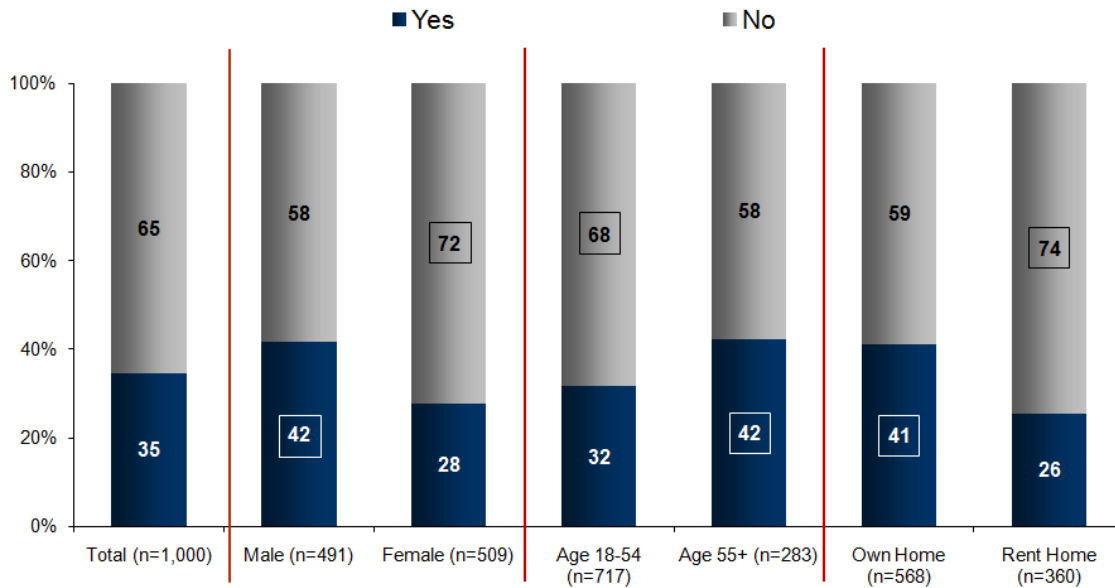


Awareness of the smart grid technology and what it offers was relatively low prior to exposure to the description of the term. Customer awareness has barely budged since last year’s survey, with 35 percent of Americans being aware of the phrase smart grid in 2011 compared to 31 percent in 2010. Males (42 percent), older Americans (55+ years; 42 percent) and homeowners (41 percent) are more likely to be aware of the concept.²

¹ Question 1: In thinking about the “smart grid” what is the first word that comes to mind? Please do not use the word “smart” in your response.

² The following statistical notation is used throughout the report: a “box” or “square” around a number on a chart indicates that the number is significantly higher than the other sub-group at a 95% confidence level (i.e. p-value of .05 or less). These statistically significant sub-groups may be highlighted in the text.

Awareness of Phrase “Smart Grid”³



Following these two questions, the respondents were presented with the following definition of “smart grid”:

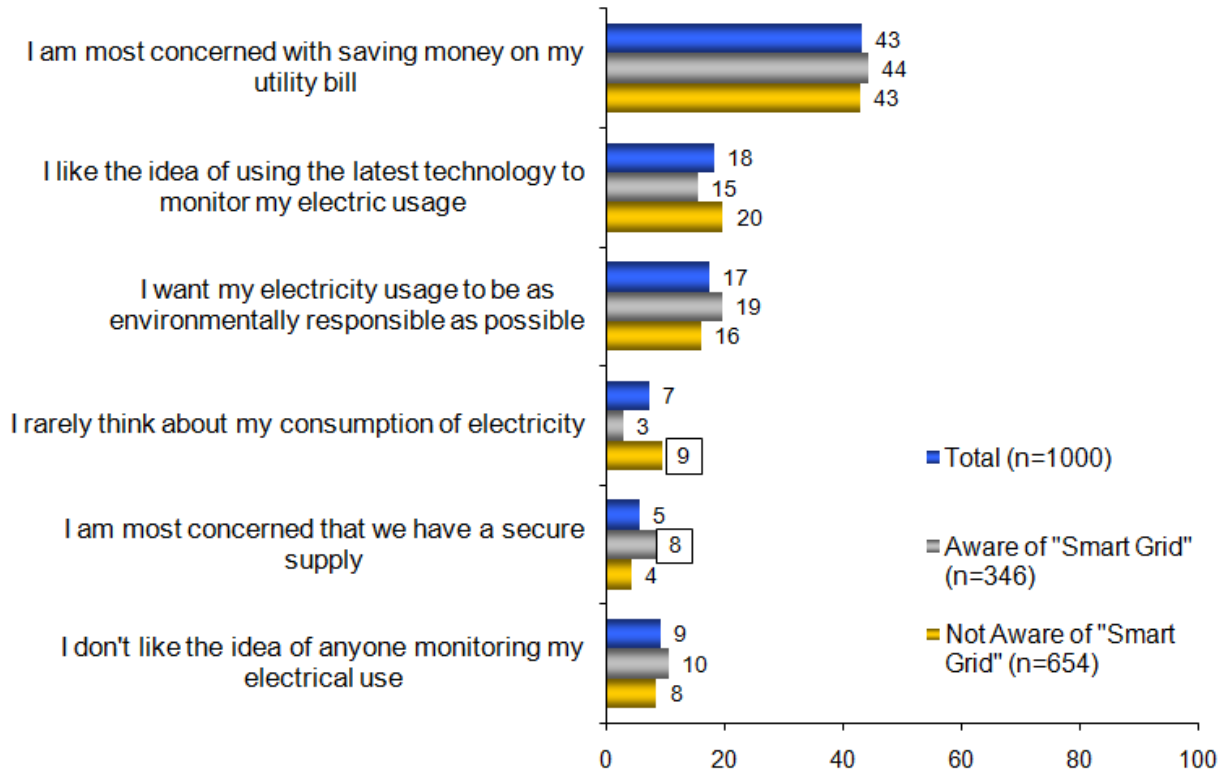
The smart grid adds a layer of digital communications technology to the existing power grid. It allows two-way communications between you and your electricity provider through a website, an in-home display panel or other means. New applications will allow you to view your electric energy usage and manage your bill. The smart grid will also provide customers with new product and savings options including management of renewable energy or energy saving devices in the home.

Personal Energy Consumption

In terms of attitudes toward their personal energy consumption, the most frequently chosen statement was, “I am most concerned with saving money on my utility bill” (43 percent). All other statements were chosen by fewer than 20 percent of these adults. Again, women (48 v. 38 percent of men) and older respondents (50 v. 41 percent of younger Americans) were most likely to feel this way.

³ Question 2: Have you ever heard of the phrase “smart grid” before today?

Attitude Towards Personal Energy Consumption⁴

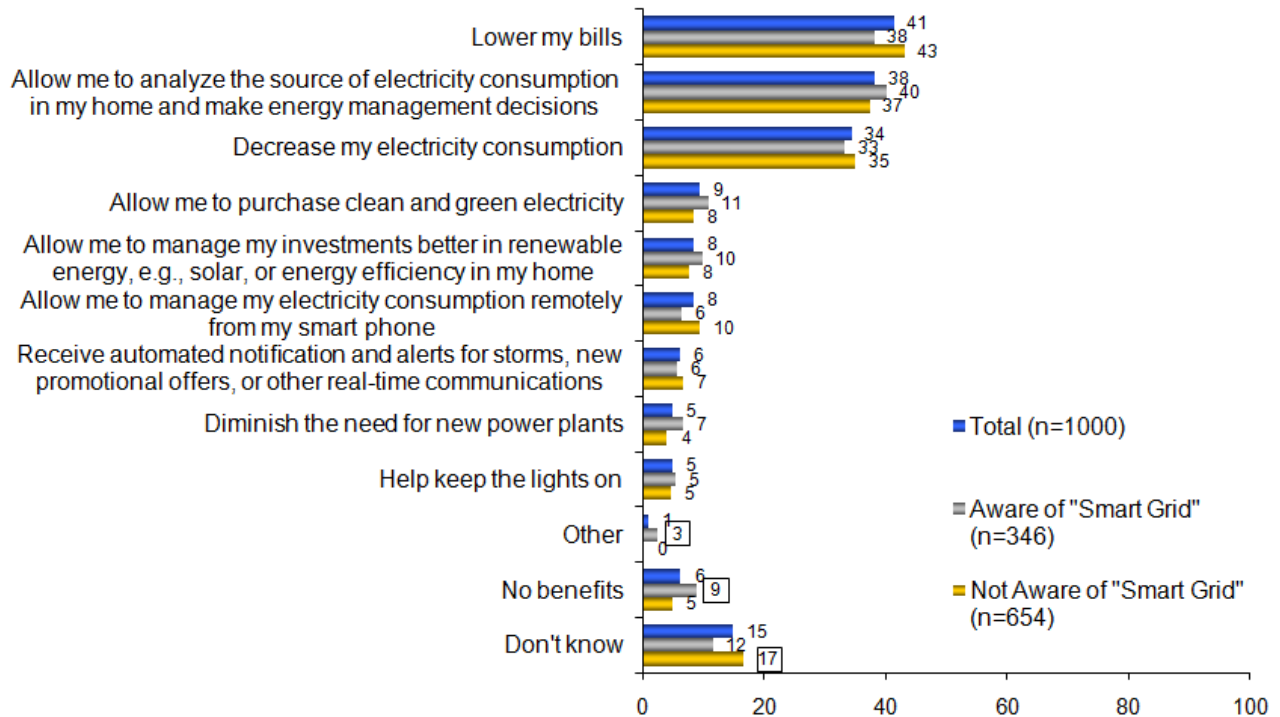


Top Benefits Delivered by Smart Grid

When asked to identify the top two benefits to be delivered right from the start by smart grid, consumers were most likely to mention three items: lower their bills (41 percent), allow them to analyze the source of energy consumption and make energy management decisions based on that information (38 percent), and decrease electricity consumption (34 percent).

⁴ Question 3: Which phrase best describes your attitude towards your personal energy consumption?

Top Two Benefits to be Initially Delivered by "Smart Grid"⁵

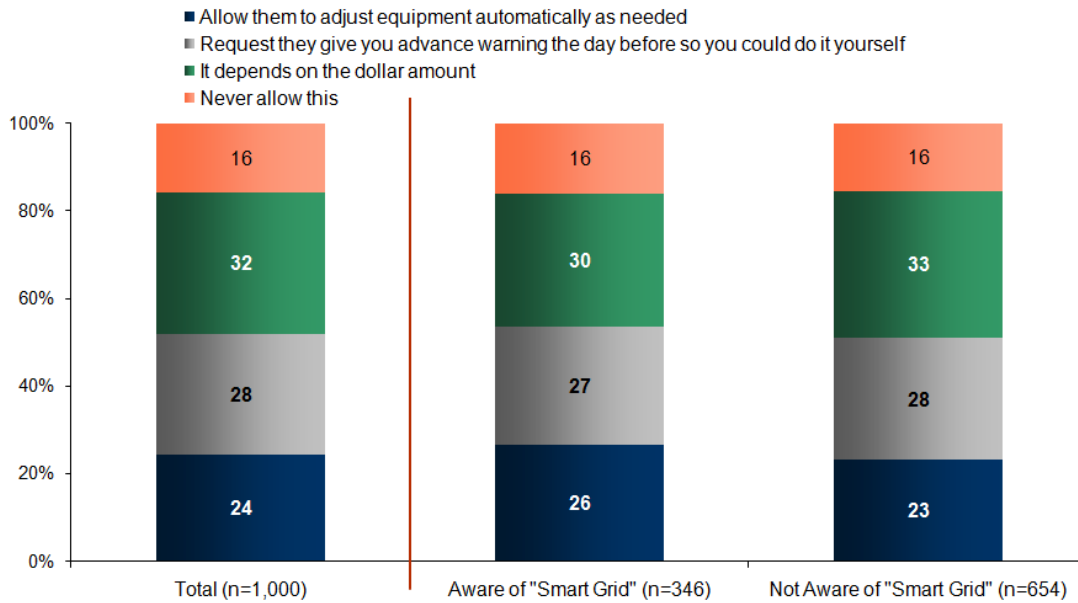


Controls and Concerns

While one fourth of consumers would allow the utility to control their high-use appliances automatically, another quarter would like notifications so they can make the adjustments themselves. An additional one third expressed willingness if the price paid was sufficient, while only 16 percent said they would never allow this. This suggests tremendous potential for dynamic pricing and demand response programs as long as people can choose arrangements that suit them. This suggests an opportunity for more customer engagement. How the adjustments will be done and by whom will be important in regard to messaging.

⁵ Question 4: What are the top two benefits you think "smart grid" will deliver to you from the start?

Reaction to Allowing Provider to Control Your Appliance⁶



Regardless of the perceived benefits, consumers have some strong concerns about this new technology related to cost, privacy, and loss of control in terms of managing their energy usage. When asked for one word to describe their biggest concern with the "smart grid" both "privacy" and "cost" were mentioned most frequently. Other terms mentioned at lower levels were "control," "loss of control," "intrusive," "big brother," and "security."

One Word to Describe Biggest Concern with "Smart Grid"⁷



⁶ Question 5: If your electricity provider asked your permission to adjust your air conditioning a few degrees or defer your pool pump or freezer defroster motor during heat wave emergencies in exchange for a rebate or lower overall rate, please choose the response that most reflects your reaction.

⁷ Question 6: What one word would you use to describe your biggest concern with the "smart grid"?



Most Valued Information About/From “Smart Grid”

Consumers found a lot of value in the various types of information that could be provided from smart grid. Eight out of ten thought it would be extremely or very valuable to find out how the smart grid would impact their bill, new pricing options that would give them the opportunity to save money, and what the smart grid would cost.

Seven out of ten found it valuable to get information about the mechanics of this technology, specifically policies around privacy and security of personal data, how the smart grid works, if they can opt out of being connected to the smart grid, and education about other things they can do with it in the future that they cannot do now.

Value of Different Types of Information from “Smart Grid” (Top-2 Box: Rated Extremely/Very Valuable)⁸

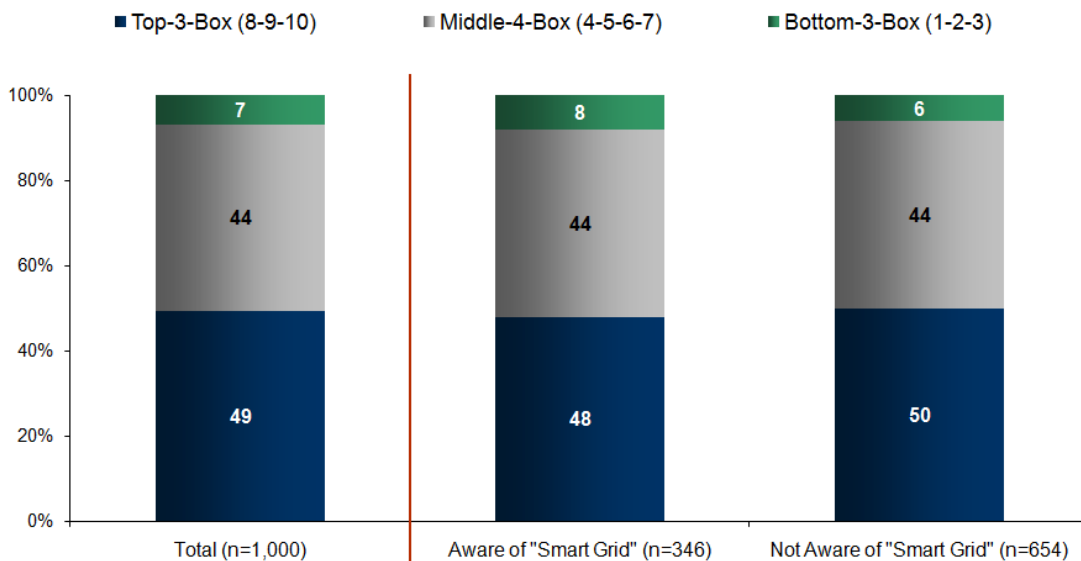
	<u>Total</u> (1000) %	<u>Aware of</u> “Smart Grid” (346) %	<u>Not Aware of</u> “Smart Grid” (654) %
Total Respondents			
How the smart grid will impact my bill	81	86	79
New pricing options that will give me opportunities to save money	81	84	79
What the smart grid will cost	79	82	78
Policies around privacy and security of personal data	75	79	73
How the smart grid works	74	75	73
If I can opt out of being connected to the smart grid	71	73	70
Education about other things I can do with the smart grid that I can't do now	69	71	68
Visibility into my family's energy consumption at the detailed level	68	68	68
The environmental impacts of smart grid	68	68	68
How the smart grid is connected to renewable energy	66	67	66
Health impacts of wireless technology used in cell phones, computers, and smart meters	58	56	60
How my family's energy usage compares to my neighbors	38	38	38

⁸ Question 7: Please rate how valuable each of the following types of information from smart grid would be to you.

Public Health and Customer Experience

Consumers generally felt that smart grid would have a positive impact on health and customer experience/service. When told this technology would help provide lower fossil fuel usage and better air quality through a better and more efficient management of old generation plants and the use of a more renewable generation, approximately half of these adults felt this would have a positive impact on people’s health (rated 8-9-10 on a 10-point “very positive” to “very negative” scale). Young adults (18 to 54 years) were more likely to feel this way (52 percent v. 43 percent of older adults).

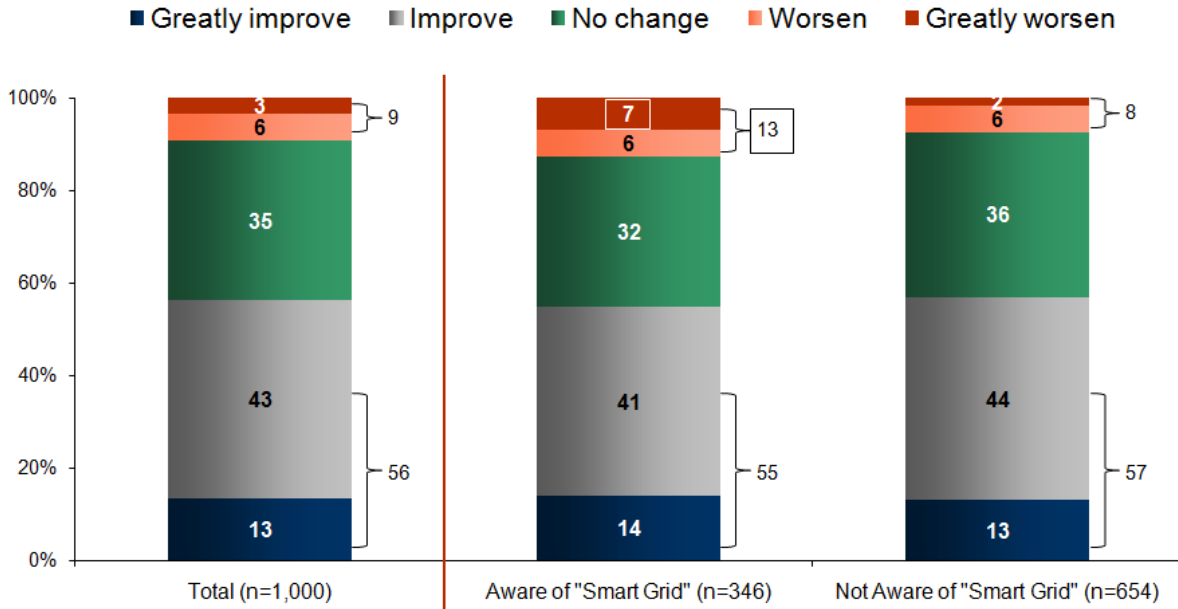
Impact of “Smart Grid” on Health⁹



More than half felt that smart grid would improve their customer experience and customer service with their local electricity supplier (56 percent greatly improve/improve). Men and younger adults (18 to 54 years) were more likely to feel their utility’s customer experience/service would improve (61 percent male v. 52 percent female and 59 percent younger adults v. 50 percent older). These findings point to smart grid as an enabling platform to build towards greater customer engagement.

⁹ Question 8: The smart grid will provide lower fossil fuel usage & better air quality through a better & more efficient mgmt of old generation plants & the use of a more renewable generation. Overall, how would you rate the impact the smart grid will have on health? Please use a 10-point scale with 10 being “Very Positive” and 1 being “Very Negative.”

Impact of "Smart Grid" on Customer Experience and Customer Service¹⁰



Preferred Customer Channels

Email was chosen by 54 percent of respondents and mail by 51 percent as the preferred methods of communication with their utility and energy supplier. Bill inserts (30 percent) and Web sites (23 percent) were other traditional methods preferred. At lower levels were more recent forms of communication, including in-home display (11 percent), mobile device (8 percent) and smart thermostat (8 percent). These lower levels for more recent technologies are consistent with the lower levels of awareness with smart grid. It is clear that more education and leadership from utilities and energy suppliers are necessary to make consumers aware of effective, low-cost communications channels.

Mobile devices are preferred at statistically significant levels by younger (18 to 54 years) as compared to older (55+ years) Americans (10 percent v. 2 percent), as well as renters as compared to homeowners (12 percent v. 6 percent).

¹⁰ Question 9: How do you think smart grid will impact your customer experience and customer service with your local electricity supplier?



***Preferred Method to Receive Information
from Electricity Supplier¹¹***

Total Respondents	<u>Total</u> (1000) %	<u>Aware of</u> "Smart Grid" (346) %	<u>Not Aware of</u> "Smart Grid" (654) %
E-Mail	54	55	53
Mail	51	47	53
Bill Inserts	30	32	28
Web Site	23	23	23
In-Home Display	11	12	10
Mobile Device	8	7	9
Smart Thermostat	8	7	8
Landline Phone	6	7	6
Door Hangers	4	4	4
Social Media/Networking	4	4	4

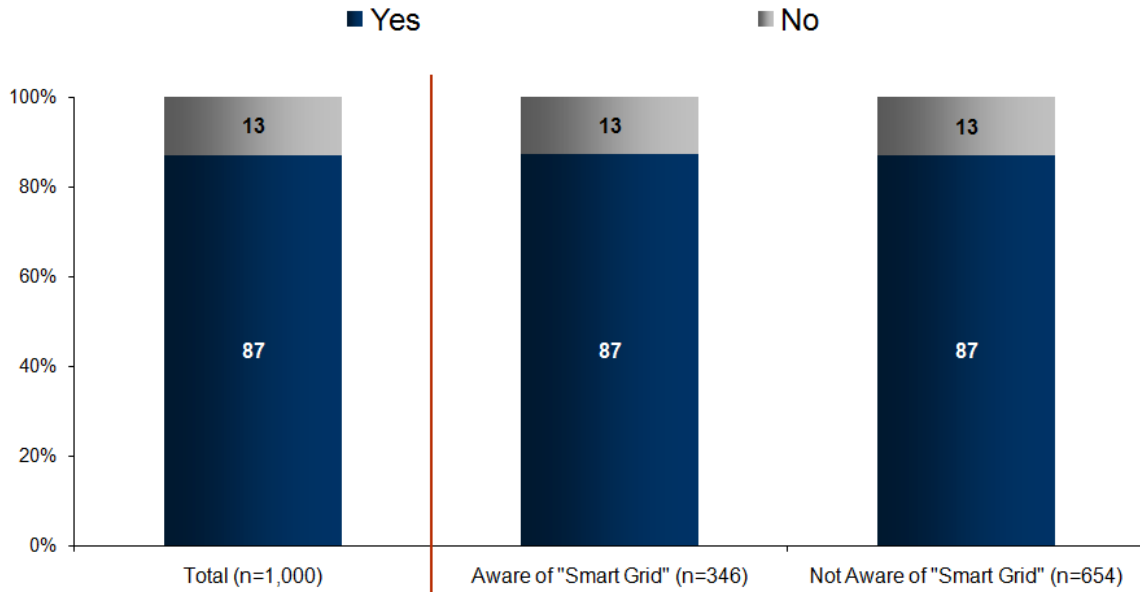
Concerns about Costs and Bill Reduction

Consumers are generally unaware of the impact of smart grid, but they like the concept. Therefore, the opportunity remains to shape consumer perceptions in a positive manner. A key extension of the opportunity in 2011, however, is that consumers seem much more receptive to and would welcome higher levels of engagement with their electricity suppliers. They are looking specifically for help to manage their bills, but more broadly, are looking for alternatives to traditional service, offering and customer service options, specifically around bill pay and energy management.

Greater opportunity for engagement is shown by 87 percent of Americans indicating that they would like utilities to suggest ways for consumers to reduce their bills.

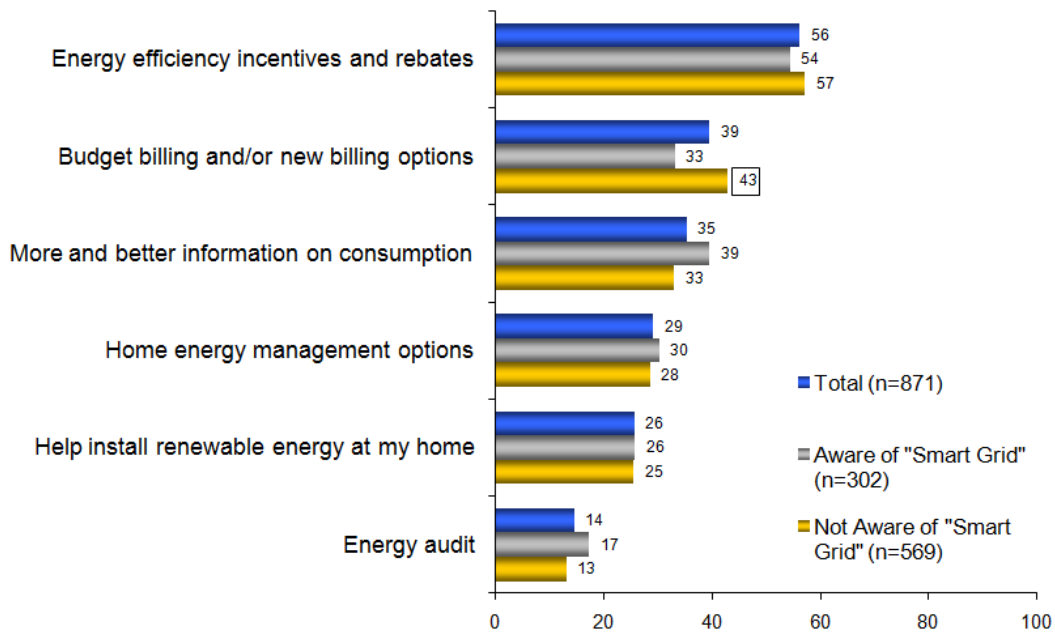
¹¹ Question 10: What would be your preferred method to receive information from your electricity supplier?

People Would Like Utility to Suggest Ways to Reduce Bill¹²



Some of the ways they suggested the utilities could help was in terms of energy efficiency incentives/rebates (56 percent), budget billing and/or new billing options (39 percent), and more/better information on consumption (39 percent).

Two Best Ways Utility Can Help Reduce Bill¹³



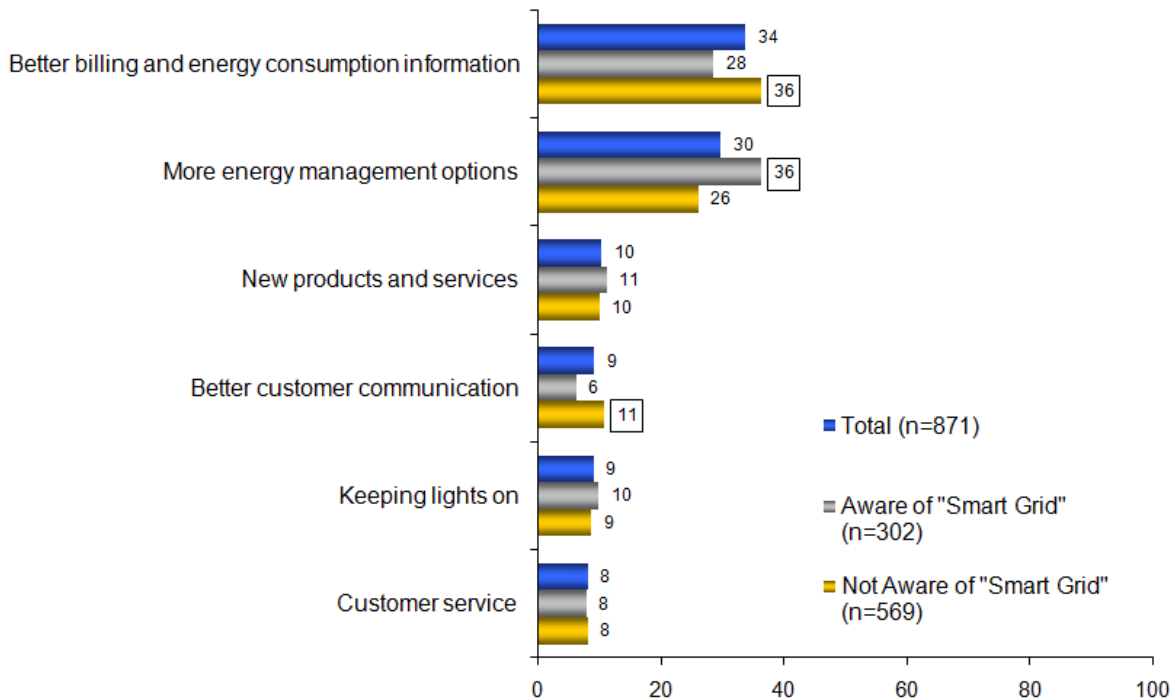
¹² Question 11: Would you like your utility to suggest ways to reduce your bill?

¹³ Question 12: How best do you feel that the utility can help you? (Note: respondent must give two answers.)



Among those who would like to receive suggestions from their utility company in terms of how to reduce their bill, they felt that in the short term smart grid would be most likely to help improve their utility's service by providing better billing and energy consumption information (34 percent) and more energy management options (30 percent).

First Area for Improvement Chosen that "Smart Grid" Could Help Deliver in the Short Term¹⁴

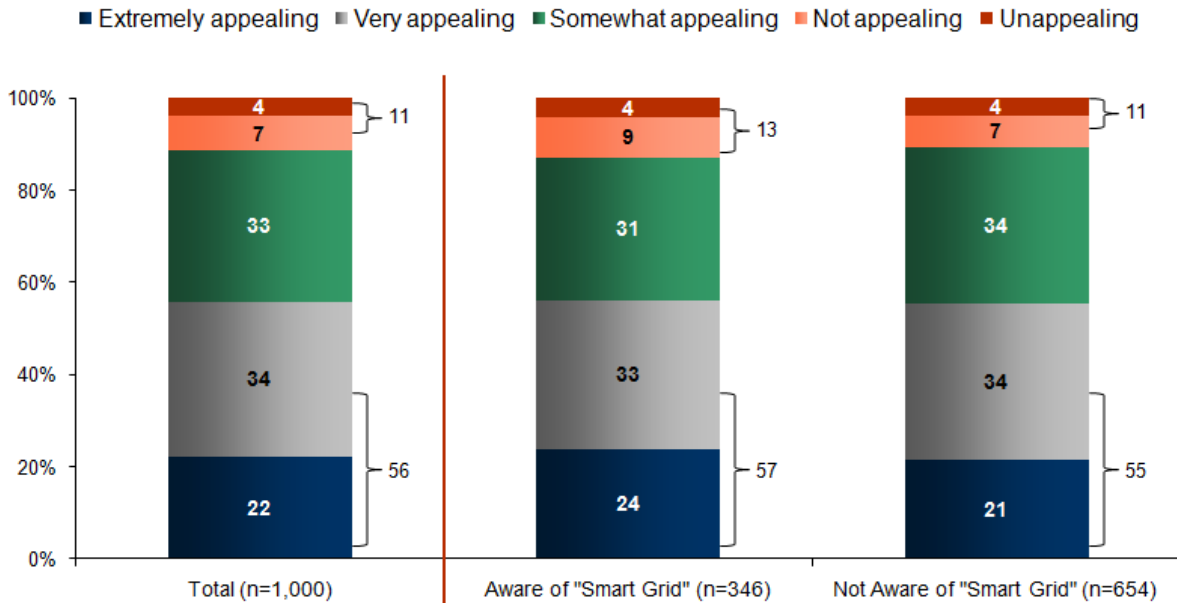


Respondents were told that smart grid will allow them to review their own energy consumption in detail. As a result, consumers will have new options in regard to billing options, payment plans and taking advantage or promotions and/or incentives.

When asked how appealing this was, 56 percent of Americans found this prospect to be "extremely appealing" or "very appealing." Another 33 percent found it to be "appealing." Appeal was highest among the younger consumers (60 percent of those ages 18-54 years v. 47 percent of those ages 55+ years).

¹⁴ Question 13: If you could choose one area for improvement of your local electric utility's service that smart grid could possibly help deliver in the short term, what would you choose to improve first?

Appeal New Options from "Smart Grid"¹⁵

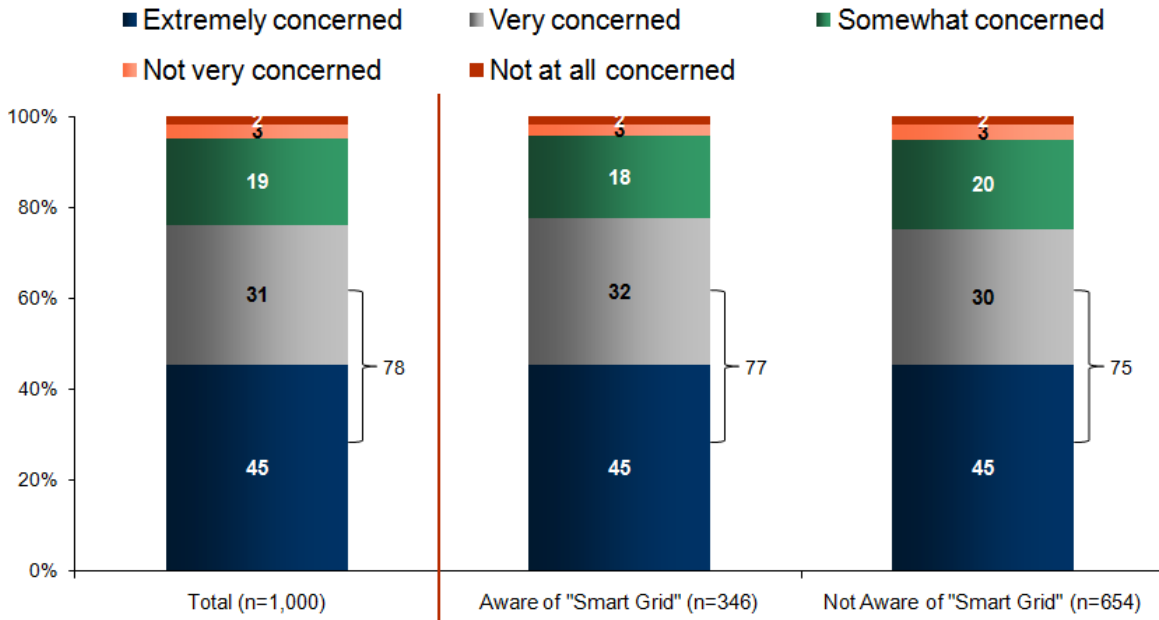


More consumers are extremely or very concerned about the potential for rising utility bills: 78 percent in 2011 as compared to 74 percent in 2010. This concern was highest among women (49 percent v. 41 percent of men), older consumers (52 percent v. 43 percent for 55+ years v. 18-54 years) and those who own their own homes (49 percent v. 40 percent of renters).

In terms of who should have access to a consumer's detailed energy consumption data, these adults strongly felt that it should only be the customer (65 percent). An additional one third felt the utility should have access to this data and two out of ten felt that family members should have access as well. Women (69 percent v. 60 percent of men) and older consumers (71 percent of those 55+ years v. 62 percent of younger Americans) stated that it should only be the customer who has access to detailed energy consumption data.

¹⁵ Question 14: The smart grid will allow consumers to review their own energy consumption in detail. ... As a result, consumers will have new options in regard to billing options, payment plans and taking advantage or promotions and/or incentives. How appealing is that to you?

Concern about Potential for Rising Utility Bills¹⁶



Access to Detailed Energy Consumption Data¹⁷

	Total (1000) %	Aware of "Smart Grid" (346) %	NotAware of "Smart Grid" (654) %
Total Respondents			
Only the customer	65	65	65
The utility	38	42	36
Family members or custodians	20	20	21
Customer approved agent	19	18	19
The government	4	4	5
No opinion	4	3	5
Don't know	4	3	5

¹⁶ Question 15: In general, please indicate how concerned you are about the potential for rising utility bills?

¹⁷ Question 16: Who should have access to your detailed energy consumption data in the future?



What Does It All Mean?

Over the past year, American awareness of smart grid has barely budged, with approximately one-third of Americans now being familiar with the concept. Yet, after reading a description of smart grid, Americans generally like the idea and believe smart grid will deliver benefits to them.

What has changed over the past year? From an analysis of the 2011 findings as compared to 2010, EcoAlign would point to the following:

- ❖ From this research and prior EcoPinion consumer surveys, there seems to be more willingness on the part of consumers to engage with their energy suppliers than in 2010. In fact, consumers would welcome advice, with 87 percent of Americans indicating that they would like advice on how to reduce their bill. This is largely driven by consumer desire to save money and/ or manage their energy consumption better due to real or expected rate increases. Smart grid could be an important platform from which to build customer engagement.
- ❖ The need for more customer-facing choices and options to manage energy bills and consumption are greater in 2011. In short, a growing number of Americans are extremely concerned about paying their energy bill. Smart grid will be viewed by Americans first and foremost about how the investment helps them achieve their pocketbook goals.
- ❖ Consumer education and communications are even more critical but challenging in 2011. There simply is a lot more messaging and messengers in the market than before around smart grid and the broader concept of "smart."
- ❖ Privacy and control are more pressing consumer issues in 2011. Consumers seem willing to give limited access to personal consumption data and share a certain amount of control with their suppliers, yet they are not willing to give carte blanche. How privacy and control options are communicated to customers will increasingly be important. And there are new issues, e.g., health impacts of smart grid, which have been introduced into the discussion over the past year.

The biggest difference in 2011, however, would be the growing focus by suppliers and other companies entering the sector on utilizing real-time consumption data for customer-facing applications and bringing new products and services to market. This represents a period of great discovery in the industry of what is going to be valued combined with questions on



pricing. EcoPinion No. 12 findings help us understand that consumers are looking for more than a new bill pay option, energy efficiency program or mobile application in isolation.

A successful consumer engagement strategy enabled and built upon smart grid will have many facets, including: 1) new products and services, 2) choices and information about supply, including self-generation and distributed renewable energy generation, 3) improved and tiered service levels (e.g., maintenance, service orders, reliability, etc.), 4) new and expanded communications channels (e.g., texting), 5) new and different bill pay options such as prepay, and 6) new energy management options.

Recommendation

Specific recommendations would include:

Focus on applications as well as relevant information. Consumers clearly are and will be seeking relevant information pertaining to smart grid, especially pertaining to ways to save money and manage their energy consumption. Some consumers are also interested in the mechanics of smart grid, e.g., the technophiles, and others are interested to know more about specific policies regarding privacy and the use of consumer information.

However, EcoAlign would posit that information in and of itself, including efforts at consumer education, will only serve as a bridge to what consumers are truly seeking – namely, new applications, new products and services, and more broadly, new choices. Our last EcoPinion survey, “Resurgence in Retail Choice and Competition?” echoed this finding. In short, information from smart grid will need to be actionable and relevant in a very short time period for consumers to believe that the investment in smart grid has a consumer payback.

Focus on transactional first. A corollary to the preceding recommendation is to focus first on the transactional – the dollars and cents connected to paying utility bills. The findings from EcoPinion No. 12 are quite clear. Smart grid will only be viewed as valuable for many consumers as long as it actually results in short-term opportunities to save money for consumers such as new bill pay options, rebates and incentives, and new energy efficiency options. No other “benefit” at this time would come even close in regard to meeting consumer expectations of the value of smart grid from a consumer perspective.



Prepay is a good example of a new bill pay option clearly enabled and enhanced by smart grid. Our prior research indicates that a significant number of customers will really appreciate a prepay option. As an added benefit, prepay could also result in energy conservation of 5 to 15 percent.

The timing of the introduction for transactional options should be aligned more with price/rate increases than the actual deployment schedule of smart grid.

Smart grid is an enabling platform for engagement. It may seem obvious but smart grid is not an end unto itself from a consumer perspective. A successful deployment of smart grid will be gauged by an increased level of engagement connected to meaningful interactions and options, and ultimately, to an enhanced customer experience that is aligned with real or expected price increases.

Utilities, in particular, need to ask: What is the value of increased customer engagement to our business? Traditionally, customers were viewed as ratepayers, and customer service as a cost center to be managed. Today, a growing number of utilities recognize that the demand side (customers) will be an important part of the resource mix, either through distributed resources, demand response, or energy conservation/energy management purposes, and will become core to the utility business to manage risk, defer or avoid capital expenditures, and meet regulatory targets and mandates. Some utilities are beginning to formulate a consumer strategy to become a "trusted energy advisor."

What smart grid gives – more options and opportunities for increased customer engagement – smart grid can take away – opportunities for new providers to enter the market to take away market share and even the possibility of limited and/or full exit from the utility system (e.g., self-generation, co-ops and community generation).

In summary, smart grid is expected to be both transformative and potentially disruptive. While the emphasis to date has been on deployment and realizing benefits on the utility side of the meter, the transformation, namely, leveraging real-time energy consumption data, will only be successful if utilities and energy suppliers embrace engagement in all its facets with consumers.



For more information about this survey, please contact Jamie Wimberly at 202-483-4443 or jwimberly@ecoalign.com.

For more information about EcoAlign and other EcoPinion consumer surveys, visit our website at www.ecoalign.com.

EcoAlign: The Energy and Environment Agency

EcoAlign is the energy and environment marketing agency. We develop and execute marketing strategies for utilities, renewable energy providers and companies operating in the energy and environment space. We are uniquely suited to help companies achieve their business objectives, from reaching efficiency program targets and improving customer satisfaction, to launching new products, increasing market share and repositioning for growth in the green tech space.

Clasma Events, Inc.

Clasma Events, Inc. is a global event company specializing in strategic conferences at the center of the worldwide energy discussion. With a finger on the pulse of leading industry technologies and trends, Clasma provides a stage for collaboration and cooperation amongst industry thought leaders at the forefront of the smart energy movement. Focusing on smart grid, connectivity, and the new energy economy, Clasma's major events include ConnectivityWeek, GridWeek, and Grid-Interop. More information on Clasma is available at www.clasma.com.

Methodology

The survey was conducted online in April 2011 among a sample of 1,000+ online adults across the U.S. Figures for gender, age, and geography were weighted where necessary to match the actual proportions in the population.

In theory, with probability samples of this size, one could say with 95 percent certainty that the results have a statistical precision of plus or minus 3.1 percentage points of what they would be if the entire adult population had been polled with complete accuracy. Unfortunately, there are several other possible sources of error in all polls or surveys that are probably more serious than theoretical calculations of sampling error. They include refusals to be interviewed (non-response), question wording, question order and weighting. It is impossible to quantify the errors that may result from these factors. This online survey is not a probability sample.



Online sample for the study was drawn from Survey Sampling International's SurveySpot online consumer panel. Survey Sampling is recognized as the premier sample provider in the market research industry. The SurveySpot panel currently has 1.6 million panel members who are recruited using a wide variety of online and offline methods, including website registrations, email invitations and telephone recruiting. For this study, invitations were e-mailed to potential respondents targeted by gender, age, census region and ethnicity.

These statements conform to the principles of disclosure of the National Council on Public Polls.