Engaging the New Energy Consumer
Accenture perspective—operational imperatives for energy efficiency
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Opening

Accenture’s latest research challenges many traditional assumptions about the drivers of—and barriers to—energy efficiency in the residential market. Energy providers must understand and effectively balance these drivers and barriers as they design products, services, campaigns and consumer interaction strategies.

Growing concerns over climate change, security of supply and volatile energy costs are prompting governments and energy providers to respond with bold new investments. Smart grid infrastructure, renewable generation capacity and an array of pricing and demand-response programs are just a few of the initiatives under way across the globe.

Many of these investments are focused in part on empowering consumers to manage their energy usage more actively and efficiently. Enabled by smarter metering and in-home technologies, consumers are gaining new tools and programs to help them use energy more efficiently. However, beyond the implementation of the necessary technology is a new and ultimately decisive challenge: engaging the “new energy consumer.”

Energy providers currently face a deluge of ideas and perspectives on how to drive mass consumer adoption of smart metering technologies and energy-efficiency and conservation (EE&C) programs. In recent years, Accenture has examined numerous consumer-oriented smart metering or energy-efficiency pilots around the world. We also have conducted several studies of consumers’ responses to these initiatives. Our resulting insights have now been expanded by the findings of our latest research program: Understanding Consumer Preferences in Energy Efficiency. The survey results and this companion analysis seek to provide a summary of the implications and recommendations we have identified, and to offer further insight into Accenture’s point of view for energy providers in the new energy era.

Traditional consumer relationships focused on reliability and cost

The current electricity system was built to deliver reliability and low cost above all else, and energy providers have typically done well in meeting those objectives. Historically, most have emphasized the supply side of their business—offering standard customer service options and basic “fringe programs” for energy efficiency. Most energy-efficiency programs have focused on the segment with the highest usage: large commercial and industrial (C&I) customers. While many energy providers are highly skilled in dealing with these large clients, residential customers present a new market—and largely uncharted territory—for energy efficiency. Today’s growing emphasis on energy usage is changing consumers’ expectations of their energy providers. More than ever, consumers are seeking energy-management solutions that help them reduce energy bills and make a positive impact on the environment.

Consequently, energy providers face the challenge of changing longstanding operational practices and cultural traditions. To put the challenge in context, consider the traditional role of the consumer in most regulated utilities. While other industries, such as telecommunications and consumer products, have evolved into “customer-centric” organizations, utilities have
largely treated customer service as an operational necessity. In fact, Accenture research shows that as much as 70 percent of service-oriented business processes in place today have remained relatively unchanged since they were introduced 25 years ago. Partly as a result, most of today’s energy providers, regulated and deregulated, still provide a traditional “standard” service focused on driving low cost-of-service or minimizing credit risk. Energy providers simply were not designed to provide differentiated customer service or to support innovative energy-efficiency programs at scale to the mass residential market. Nor have they reshaped their organizations to do these things.

On the demand side, consumers also have been passive in their interaction with energy providers. Viewing electricity as a basic service, they maintain a “low-value” relationship with their energy providers. Typical consumers interact with their providers just a few times each year. Their preference for prioritizing other home-service payments before basic electricity also underscores the certainty of service and the relatively small “percentage of the pocketbook.”

Although there have been some achievements over the years, the fundamental relationship between consumer and energy provider has evolved at a glacial pace.

The time has come for a new approach to consumers

Regardless of their competitive environment, energy providers around the world now face an array of new regulations, mandates and consumer preferences for EE&C programs. Helping consumers manage and optimize their energy usage requires a new kind of relationship between the energy provider and consumer. Successful energy providers understand and leverage consumers’ perceptions, behaviors and values—and are the ones that will ultimately generate the most value and achieve high performance in the new energy era.

Today, many energy providers are pursuing smart metering and/or EE&C programs that depend on significant levels of consumer participation. For providers, success hinges on a significant shift in operational mindset to inform, promote and support sustainable and scalable consumer adoption.

This reality presents several unique challenges. Simply installing smart metering devices and in-home displays will not drive lasting consumer adoption. Energy providers must develop a more comprehensive competence in consumer energy support—including the ability to address the nuances of consumers’ energy-efficiency needs and to tailor products and service channels accordingly. The consumer energy support competence must include advanced insight and segmentation, new service channels and advanced products. It also must provide a new value proposition that convinces consumers the extra effort is worthwhile.
When developing a strategy for the new energy era, providers must tackle these and other key questions:

- Do consumers have a clear understanding of the impact of electricity consumption on the environment?
- Do consumers know how they can optimize their own electricity consumption?
- Do they feel social pressure to do so?
- Which organizations do consumers trust to inform and educate them about actions they can take to optimize electricity consumption?
- Are consumers aware of energy-efficiency programs already available to them?
- What are the drivers and barriers to adoption of EE&C programs?

The combination of smart metering and demand-response programs promises a host of benefits to all stakeholders. It presents an opportunity to give residential consumers long-overdue visibility and control over their consumption and the size of the resulting bill—helping better align supply and demand and, ultimately, promoting EE&C. Furthermore, many energy providers are counting on their customer operations to deliver a significant portion of strategic benefits around operational efficiencies and mandated energy conservation.

No matter the strategy or approach to managing demand, all energy providers face one fundamental task: They must get to know their consumers. Across business models and regulatory frameworks, realizing the full potential of smart metering benefits requires a new core competence in consumer energy support. A consumer-centric approach is essential to creating and managing customer segmentation, managing channels, enabling emerging channels (such as social media), developing new products, managing campaigns and, ultimately, delivering a service model that creates and supports a strong consumer experience.

In other words, when it comes to dealing with consumers, the game is changing. The question driving our research and commentary is this: Is it truly possible to drive widespread, lasting mass adoption by consumers?

Undoubtedly, the answer is yes.

Success will require energy providers to undertake a radical rethink of their approach to—and relationship with—the residential consumer and their approach to using data and information. This approach must reflect and reconcile a range of diverse, and often contradictory, consumer priorities. In an era of ever-increasing consumer expectations, a "one-size-fits-all" approach will no longer guarantee success.

To achieve high performance, energy providers must take a bold, fresh and systematic approach to reshaping their strategies and understanding, reaching and engaging the new energy consumers.
1. Driving energy efficiency and conservation (EE&C): Rethink the strategy

Small changes will not be enough. Energy providers must build a new core competence—and reshape their customer operations.
To gain insights into the behaviors of today’s consumers, Accenture recently completed the research program, *Understanding Consumer Preferences in Energy Efficiency*. The purpose of our study: to capture electricity management views of more than 9,000 end consumers in 17 geographies.

Accenture’s industry experience and other research, including our recent survey, reveal that consumers’ level of enthusiasm for or commitment to contributing to EE&C falls into three main categories:

1. **Not knowing**
   These consumers fail to recognize the positive impact that regular energy-management activities can have on their ecological footprints and on their ability to manage the bill. In some cases, they are largely unaware of their individual consumption and do not understand the specific environmental impacts of using energy. In other cases, consumers are “green” by nature but are unaware of specific programs or the benefits that they can realize through them.

2. **Not able**
   These consumers are not able to participate in EE&C initiatives (such as smart metering) because of their socioeconomic circumstances. For example, they may be apartment dwellers who do not have a choice about their energy provider programs or low-income consumers who cannot afford to pay a premium for smart meter installation or other surcharges.

3. **Not willing**
   These consumers either regard EE&C initiatives as inconvenient or, in many cases, believe they are already doing their “fair share” and feel no need to adopt new EE&C programs or behaviors.

For each distinct barrier, energy providers must develop different strategies. Yet all strategies must be founded on the same principle: that consumer behavior must change for EE&C programs to become a mainstay in people’s everyday lives.

**Deploy consumer-centric processes**

Against a backdrop of smart metering technologies and EE&C programs, energy providers face the questions of how to effectively and efficiently manage operations. Many of today’s customer care processes are outdated; they were designed around simpler tariff structures to drive low cost-to-serve and minimize credit or revenue risk. Because they were not necessarily built around the consumer, they cannot effectively drive EE&C adoption and support the delivery of these programs.

Accenture research suggests that 40 to 60 percent of core meter-to-cash processes will need to be changed or redesigned with the introduction of a full suite of smart metering and supporting consumer-centric EE&C programs. Furthermore, we believe many policies and programs related to current rates and products—including budget billing, equalized payment plans, low-income programs, economic development initiatives and credit

Not every smart metering project is initiated with the primary aim of driving improvements in EE&C. These projects also target other objectives—including increasing automation, improving operational efficiencies and boosting competitiveness. Not surprisingly, energy providers that have pursued EE&C programs for these reasons have invested little in learning about consumer needs and preferences; they have directed most of their resources toward meters and integration technologies. But to be successful at EE&C, providers must have an understanding of the consumers targeted to adopt these programs. Such an understanding is more important than ever, with consumer behaviors constantly changing in response to economic events, such as the recession, and social movements like the push for “green” products and services.
procedures—will change as energy providers roll out smart meters and related EE&C programs. More generally, operating effectively in a smart meter-enabled world will require an unprecedented degree of integration and coordination across an energy provider’s organization. As a result, end-to-end processes across the organization and the organizational structures through which they are managed will need to adapt and change.

Transform consumer relationships

For energy providers, evolving consumer relationships represent a change of epic proportions. As energy providers strive to redefine these relationships, they must address key questions around encouraging consumer adoption and uptake of EE&C programs at the lowest cost-to-adopt and running operations at the lowest cost-to-serve. To identify answers to those questions, Accenture recommends that energy providers focus on three critical areas:

Knowing the consumer

Energy consumers’ values and preferences are changing. The industry is only beginning to understand the new energy consumer. What has become clear is that consumers fall into segments based on nontraditional criteria, such as their attitudes and values regarding the environment and their individual sense of responsibility to make a difference. Understanding consumer values and providing differentiated EE&C programs will help providers achieve the desired levels of trial and active participation at the lowest cost-to-adopt.

Reaching the consumer

Current interactions between energy providers and consumers typically focus on billing or customer service. Marketing, sales and channel management for nontraditional customer-facing tasks require skills organizations may not currently possess. As a result, attempts to engage with consumers around energy efficiency, conservation and smart metering often fall flat. Finding the right messages and developing the right third-party partnerships to inspire adoption will be challenging tasks.

Even with the right messaging, the ongoing fragmentation and proliferation of communication channels make it more difficult for energy providers to reach the right

Taking the pulse of the new energy consumer

Accenture developed Understanding Consumer Preferences in Energy Efficiency to investigate the attitudes and preferences toward electricity management programs of consumers around the world. Conducted online in January 2010 and involving more than 9,000 individuals in 17 geographies, the survey provides fresh insights into the emerging trends in new energy consumerism, including:

• Contradictions between consumers’ perceptions and actual knowledge of energy efficiency.
• The importance of trust in the relationship between energy consumer and provider.
• Control over energy usage emerging as a key factor when consumers are considering adopting EE&C programs.
• New channels and emerging individual behaviors surrounding social interactions, forcing energy providers into new types of consumer/provider interaction.
• The influence of fragmented, nontraditional consumer preferences on the adoption of EE&C programs.
consumers with the right messages at the right time. Consumers exert increasing control over which messages they receive through various digital, social and other media. A sound understanding of the best way to reach each existing and new consumer will have a positive impact on cost-to-adopt and cost-to-serve.

Delivering the EE&C experience

Increasing complexities in knowing and reaching consumers will ultimately affect how energy providers serve them and cater to their needs. Consumers tend to have distinct preferences and responses to programs based on individual price sensitivity, levels of self-control versus external control and environmental impact. The advent of new products and services drives the need to reengineer meter-to-cash processes and to develop an enabling organization. That, in turn, creates large-scale challenges. Energy providers must implement these profound changes while continuing to provide an uninterrupted, reliable service.

Although the challenges may seem daunting, there is a way forward. Some energy providers are making great progress with their smart metering programs. There are successes in designing and implementing EE&C programs, managing multiple channels and deploying transformational change programs while maintaining service quality and consistency. These companies have advanced in the journey to high performance by developing new individual and organizational capabilities.

To enable consumer relevance, energy providers will require a consumer-centric core competence that includes three main organizational capabilities (see Figure 1).

Figure 1.
Three main organizational capabilities of the consumer-centric core competence.

Develop the consumer-centric core competence

To meet the challenges of knowing, reaching and delivering to new energy consumers, energy providers must invest in consumer relevance. Accenture defines consumer relevance as an intimate and ongoing knowledge of individual energy consumers combined with an ability to proactively design and deliver programs tailored to meet their needs and interests, while also achieving the energy provider’s business objectives.

Actionable segmentation and consumer insight

The ability to segment consumers on the basis of nontraditional factors, such as attitude, behaviors and values, together with the ability to draw conclusions that enable development of targeted EE&C offerings.

Consumer-centric marketing and multi-channel management

The ability to cost-effectively refine and target marketing to the segment and/or individual energy consumer, leveraging existing and emerging channels.

Energy-management service design and delivery

The ability to design, develop and deliver innovative energy-management services that help the energy provider achieve consumer adoption, regulatory compliance and other business objectives.
Building a more detailed picture of consumers

The energy provider of the future will be highly integrated, with consumer-relevant, market-facing operations. In a recent survey conducted by The Economist Intelligence Unit (see Figure 2), utility executives said a more detailed understanding of consumer behaviors and preferences would be the biggest benefit of integrating functions across marketing, sales and service. Going forward, energy providers will need to develop more sophisticated consumer behavior research and insight, and use the results to develop targeted offerings for specific segments of their customer base.
Figure 2.
Actions to integrate energy providers’ core operations.

Which of the following would provide the biggest benefits in integrating your organization’s marketing, sales and service activities? Select up to three.

(%) respondents

Developing and sharing a detailed picture of customers, behavior and preferences 31%
Presenting customers with a consistent picture of the organization 30%
Making each unit aware of how the others have interacted with a given customer 30%
Prioritizing resources directed toward customers by total value over life of customer 28%
Helping each function find and act on ways to support the others 26%
Integrating customer tracking from lead through post-sales service 25%
Establishing common definitions, assumptions and data 18%
Measuring the probability that leads will turn into sales, and using these scores to guide sales 9%
Our company sees no need to integrate our marketing, sales and service activities 4%
Other 4%
Don’t know/Not applicable 12%


Every energy provider will be challenged to balance investment in a consumer-centric core competence while continuing to deliver uninterrupted high-quality service. There is no universal solution. Each provider must devise its own approach based on factors such as size, geographic footprint and regulatory environment. What is clear, however, is that in deregulated markets, providers that fail to embrace consumer relevance will be left behind by more proactive competitors; while in regulated markets, regulatory mandates will fail to be met.

In the following chapters, we address three main focus areas challenging today’s energy providers:

Knowing the consumer:
Ignite interest among new energy consumers.
To tailor the consumer experience, energy providers must pursue a fresh, new and highly analytical view of consumers.

Reaching the consumer:
Appeal to new energy consumers.
Energy providers need to craft multi-channel strategies that tap the right tools and approaches for informing and influencing consumers.

Delivering the experience:
Engage new energy consumers through tailored offerings.
EE&C programs are not commodities. Energy providers need to evolve into trusted advisors offering tailored and continually optimized products, services and support.
Ignite interest among new energy consumers

To tailor the consumer experience, energy providers must pursue a fresh, new and highly analytical view of consumers.
Residential consumers are critical enablers—or inhibitors—of EE&C success. After all, they must sign up for programs and make changes to their daily lives. However, before consumers will take action, they must be aware of and understand the available programs, products and services. Thus, energy providers cannot promote EE&C and design services to achieve it until they first understand the residential consumer base from a different perspective. Unfortunately, traditional segmentation based on credit risk or customer lifetime value does not identify consumers’ propensity to adopt EE&C programs. Instead, energy providers must tailor EE&C messaging by combining demographic and behavioral variables with information on consumer attitudes, values and needs. Targeting these “microsegments” will enable energy providers, at the lowest cost possible, to market to, sell to and serve the consumers most likely to adopt.

Capture consumer mindshare

The good news: There is room for much greater consumer adoption of EE&C. The bad news: Energy providers must substantially compete for consumer mindshare. In Accenture’s The Road to Recovery: A Report on Consumer Behavior in the New Economy (2009), we found that end consumers are less interested in the energy industry than in any other sector (see Figure 3). Energy providers must address this apathy as they implement strategies to drive adoption of EE&C programs and work to develop stronger relationships with consumers.

Although EE&C programs deliver significant environmental benefits, the Understanding Consumer Preferences in Energy Efficiency survey revealed that most end consumers do not view their electricity consumption as having a significant impact on the environment. Only 42 percent of respondents recognized the environmental consequences of their own electricity consumption; by contrast, 85 percent acknowledged the negative repercussions of their petroleum usage. The implication is that consumers do not appear to link their electricity usage to the upstream production required to fulfill demand. If they are to embrace EE&C programs, consumers need to understand these concepts. The low level of enrollment in EE&C programs (9 percent) could be attributed to end consumers’ lack of understanding of the consequences of their energy consumption, and to their low awareness of these initiatives (28 percent).

Furthermore, the uptake of EE&C programs will actually be impeded by end consumers’ rising adoption of other environmentally friendly activities, such as waste disposal and recycling; these initiatives also compete for consumer mindshare. Many consumers believe they are already “doing their part” for the environment; they do not realize that EE&C programs offer benefits...
distinct from those achieved through participation in these more traditional activities.

Use analytics to uncover consumer values

In addition to capturing consumer mindshare, energy providers face the task of creating segmentation that groups customers according to their propensity to adopt EE&C programs. To target the right consumers, energy providers must:

- Create segmentation consisting of multiple layers to identify microsegments (see Figure 4).
- Rethink traditional segmentation that relies on such metrics as lifetime value, credit risk or traditional troubleshooting preference.
- Explore new metrics for rating consumer value (based on the desired outcomes).
- Use metrics such as cost-to-adopt to assess the investment required to convince a particular end consumer to participate actively in an energy-efficiency activity.

Energy providers concerned about the positioning and messaging of new products and services may use attitudinal measures only to draw lines between consumer groups. However, the most successful go-to-market strategies seek to understand consumer attitudes and observable behaviors. Thus, energy providers are well-advised to develop and apply segmentation that groups consumers according to their attitudes and behaviors. With those insights, providers can promote the uptake and regular usage of products and services that support EE&C.

We used the results of Understanding Consumer Preferences in Energy Efficiency to develop behavioral segmentation that can help energy providers determine how to promote adoption and sustained usage of EE&C programs. From the responses to the questionnaire, we identified six segments of roughly equal size but with distinct needs and preferences (see Figure 5).
Figure 5.  
Global consumer segments.

<table>
<thead>
<tr>
<th>Proactives (16%)</th>
<th>Eco-rationals (12%)</th>
<th>Cost conscious (17%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adoption attributes:</strong></td>
<td><strong>Adoption attributes:</strong></td>
<td><strong>Adoption attributes:</strong></td>
</tr>
<tr>
<td>• Highest willingness to take action to reduce the use of major appliances in their home</td>
<td>• Highest interest in the reduction of their impact on the environment</td>
<td>• Highest sensitivity to electricity bill savings</td>
</tr>
<tr>
<td>• Lowest interest in the reduction of their impact on the environment</td>
<td>• Highest impact of social pressure to drive them to take action</td>
<td>• Higher impact of social pressure to drive them to take action</td>
</tr>
<tr>
<td>• Higher preference for in-person contact at their home to get general information about electricity management programs</td>
<td>• Highest positive perception of a person having enrolled in an electricity management program</td>
<td>• Higher positive perception of a person having enrolled in an electricity management program</td>
</tr>
<tr>
<td></td>
<td>• Higher willingness to decrease level of comfort but remain sensitive to savings in their electricity bill</td>
<td>• More likely to be discouraged from adopting an electricity management programs if their bill was more complicated or if it required more time to manage their electricity usage</td>
</tr>
<tr>
<td></td>
<td>• Higher interest in energy-efficiency products and services such as smart meters, solar panels, renewable energy, home-energy packages, loyalty programs or technology recycling</td>
<td>• Higher level of trust toward utilities/electricity providers</td>
</tr>
<tr>
<td><strong>Demographics +:</strong></td>
<td><strong>Demographics +:</strong></td>
<td><strong>Demographics +:</strong></td>
</tr>
<tr>
<td>• Higher proportion use electricity to heat their home</td>
<td>• More often women</td>
<td>• More often women</td>
</tr>
<tr>
<td></td>
<td>• Often seek advice before purchasing and are ready to pay more for quality products</td>
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<table>
<thead>
<tr>
<th>Pragmatics (21%)</th>
<th>Skepticals (21%)</th>
<th>Indifferents (13%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adoption attributes:</strong></td>
<td><strong>Adoption attributes:</strong></td>
<td><strong>Adoption attributes:</strong></td>
</tr>
<tr>
<td>• Lower acceptance of utility control</td>
<td>• Lowest acceptance of utility control</td>
<td>• Lowest willingness to take action to reduce the use of major appliances in their home</td>
</tr>
<tr>
<td>• Higher sensitivity to electricity bill savings</td>
<td>• Lowest trust toward utilities/electricity providers</td>
<td>• Higher acceptance of utility control</td>
</tr>
<tr>
<td>• More ready to switch products and brands</td>
<td>• Lower sensitivity to electricity bill savings</td>
<td>• Lower proportion believe electricity has a negative impact on the environment</td>
</tr>
<tr>
<td>• Less prompt in adopting new technologies</td>
<td>• Lowest sensitivity to social pressure</td>
<td>• Lower proportion think they understand enough about the actions they can take to optimize their electricity consumption</td>
</tr>
<tr>
<td><strong>Demographics +:</strong></td>
<td><strong>Demographics +:</strong></td>
<td><strong>Demographics +:</strong></td>
</tr>
<tr>
<td>• More often men</td>
<td>• Higher income</td>
<td>• More often men</td>
</tr>
<tr>
<td></td>
<td>• Higher proportion use natural gas to heat their home</td>
<td>• Below 24 years old</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lower income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The proportion of early adopters of new technologies and new trends is the highest in this segment</td>
</tr>
</tbody>
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Base: All respondents  
Methodology note: Results based on a conjoint analysis; significant differences from the average have been highlighted
Consumer insight and analytics in action

Recently, a major US electricity company wanted to understand its customers’ motivations around conservation, energy-efficiency and natural gas conversion decisions. The company intended to use the insights to create a better fact base for targeting customers, improving communications and aligning products with customers. Utilizing demographic, premise and usage information paired with attitudinal and behavioral responses, the company identified five distinct customer segments. Ultimately, the segmentation provided “target tiers” and actionable segments based on customers’ energy-efficiency behavior. Furthermore, the segmentation helped the energy provider align all customers to the segments in a scalable manner to help it develop messaging for pilots.
The survey also presented choice-based questions about various combinations of four key components of EE&C programs:

- Self-action required
- Utility control
- Environmental impact
- Electricity bill impact

We analyzed responses using a conjoint analysis, enabling us to understand how much consumers weight each component of a program in their adoption decision, to probe their preferences between different options and then to segment them according to those preferences (see Figure 6).

One of our most significant findings: the high degree of influence that utility control exerts over end consumers’ energy-efficiency decisions. On average, a weighting of 37 percent is attributed to control (for example, programmable thermostats, home appliances and outdoor fixtures). By way of comparison, cost savings have only a slightly stronger bearing on these decisions, with a weighting of 38 percent. In other words, consumers are sensitive to giving full control of their electricity consumption to energy providers.

The survey also revealed that the average consumer places a weighting of 17 percent on environmental impact when deciding to adopt an electricity management program. This lower relative weighting indicates that providers will not acquire customers by promoting environmental benefits only; rather, providers should combine these benefits with other proven incentives.

Furthermore, energy providers can adopt an even more sophisticated approach to segmentation by identifying and targeting those consumers willing and able to adopt EE&C programs within each segment. The “willingness” of consumers is a scale of measure from opposition to eagerness toward EE&C programs. The “ability” of consumers is a scale of measure from constraint to freedom toward EE&C programs. Accenture’s segmentation analysis indicates that the relative size of consumer segments remained almost constant when the behavioral model was overlaid with participants’ willingness and ability to adopt. Therefore, energy providers should adapt their segmentation strategy to address all segments while specifically targeting those most likely to adopt. By focusing first on the willing-and-able microsegments, providers can lower cost-of-adopt.

While willing-and-able consumers should be top priority for energy providers, those who are unwilling but able should also be considered for targeted strategies. Compared to changing their ability to adopt, it is far easier to influence consumers’ willingness to participate. To overcome the initial willingness barrier, energy providers should consider targeted offerings and education programs.

Figure 6.
Weighting placed on adoption decision criteria by each segment.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Proactives</th>
<th>Eco-rationals</th>
<th>Cost Conscious</th>
<th>Pragmatics</th>
<th>Skepticals</th>
<th>Indifferents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-action required</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Utility control</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Environmental impact</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Electricity bill impact</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: The relative influence of each criteria:
Long bar (in a graphic) = a stronger weight on decision to adopt
Medium bar = a moderate weight on decision to adopt
Short bar = a weaker weight on decision to adopt
+ = a more positive response to the criteria
- = a more negative response to the criteria
Blank = a neither positive nor negative response to the criteria

Base: All respondents
Methodology note: Results based on a conjoint analysis
Meanwhile, energy providers must address the “unable” portions of their end-consumer segments. Consumers with low incomes, pensioners, at-risk consumers and those in large, multidwelling complexes may be interested but simply unable to participate in programs. Energy providers should ensure that as they deploy new programs, existing programs are maintained or carefully adapted to help those consumers in need. Especially for new rate and tariff structures, energy providers need to be careful to protect vulnerable customers from unanticipated adverse impacts due to the customers’ inability to take advantage of these new types of products. Moreover, energy providers should develop education programs and programs that rely less on technology and more on behavioral changes to allow for greater participation from the “unable” segment.

In short, ensuring that the entire consumer base is engaged on some level by an EE&C program will be important in building wider stakeholder support.

Leverage consumer insights in developing a consumer-centric core competence

Segmenting for EE&C is not a goal in itself, but rather a capability required to create a true consumer-centric core competence. Analyzing the segmentation results of the Understanding Consumer Preferences in Energy Efficiency survey demonstrates the breadth of consumers’ propensity to adopt EE&C programs. As the analysis suggests, energy providers should focus on consumers who belong to favorable segments and that have the lowest cost-to-adopt (that is, are willing and able). For most energy providers, this represents about 20 to 40 percent of their consumers. While strategies that promote the immediate uptake of these programs should be targeted at a subset of the consumer base, those focused on EE&C education should be directed at all consumers.

Consumer analytics are central to the development and implementation of a consumer-centric core competence. Analytics enable energy providers to draw linkages between consumption per premise and customer behaviors and attitudes. Segmentation should be founded on these associations and used to identify homogeneous groups across the customer base. Leveraging customer insight, energy providers can identify the key messages that will drive customer adoption of demand-side management programs. Customer insight and analytics also arm marketing and sales with the insight to develop tailored product portfolios, marketing initiatives and service offerings.

Consumer segmentation in action

A major Spanish energy provider plans to widen its product portfolio and become a global leader in supplying energy-efficiency equipment, performance contracting and demand response. To help it achieve these objectives, the provider has undertaken strategic segmentation of all 12 million end consumers. The resulting consumer insights are used in marketing, campaign definition and outbound campaign execution, including demand-response programs.
3. Reaching the consumer: Appeal to new energy consumers

Energy providers need to craft multi-channel strategies that tap the right tools and approaches for informing and influencing consumers.
Energy providers need to identify the touchpoints at which consumers are most receptive to learning about, signing up for and receiving support on EE&C programs. Since consumers who belong to different groups have varying opinions on these touchpoints, providers must tailor strategies to each to achieve widespread adoption.

In addition to developing channel strategies specific to consumer groups, energy providers must determine the marketing strategies best suited to them. Providers should continue to consider existing tactics. Yet, they also must examine emerging opportunities presented by new technologies and third-party partnerships. Social media is an example of a technology-enabled capability that could transform provider-consumer interactions.

Figure 7.
Top-five convenient times.

When is it most convenient for you to learn more about electricity management programs?

<table>
<thead>
<tr>
<th>Top-five convenient times</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you receive your bill</td>
<td>37%</td>
</tr>
<tr>
<td>While signing up for your electricity service for your new home</td>
<td>15%</td>
</tr>
<tr>
<td>When you pay your bill</td>
<td>12%</td>
</tr>
<tr>
<td>When shopping for your new home appliances</td>
<td>10%</td>
</tr>
<tr>
<td>When you contact your electricity provider with questions on your bill</td>
<td>9%</td>
</tr>
</tbody>
</table>

Base: All respondents

Use diverse channels to increase interaction

Understanding Consumer Preferences in Energy Efficiency reveals that 37 percent of consumers prefer to learn about electricity management programs when they receive their energy bills. Those who did not share this preference opt for a broad array of other timing options (see Figure 7).

These findings suggest a diverse set of “moments of truth,” which need to be addressed appropriately to meet consumer expectations and achieve desired outcomes.

According to the survey, consumers also show a preference for traditional channels. Overall, the channels that fared best were online, in person at home and by telephone. In terms of receiving advice, what is most interesting about these findings is how many respondents selected the in-person-at-home channel relative to the web (see Figure 8):

- Only 11 percent more participants indicated they would like to receive customized advice on their electricity management through the internet rather than through an in-home consultation (33 percent compared to 22 percent).
- While 37 percent of participants claimed they would like to sign up for an EE&C program online, 20 percent reported that they would prefer to do so through the in-person-at-home channel.

Preferences for the in-person-at-home channel could be because these programs are more complex in nature than traditional tariff and rate structures or because they could have an impact to consumers’ lifestyles.
Figure 8.
What would be your first choice to do each of the following?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Over the Internet</th>
<th>In person at your home</th>
<th>Paper mail</th>
<th>Email</th>
<th>Over the telephone</th>
<th>In-store</th>
<th>TV/radio spots, programs</th>
<th>In-home energy display</th>
<th>In your workplace</th>
<th>Social media (i.e., blog, Twitter, Facebook)</th>
<th>SMS-text message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get general information on electricity management programs</td>
<td>46%</td>
<td>15%</td>
<td>10%</td>
<td>8%</td>
<td>6%</td>
<td>6%</td>
<td>4%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Get customized advice on the best electricity management programs for your situation</td>
<td>33%</td>
<td>22%</td>
<td>8%</td>
<td>10%</td>
<td>11%</td>
<td>9%</td>
<td>0%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Purchase or sign-up for an electricity management program</td>
<td>37%</td>
<td>20%</td>
<td>7%</td>
<td>7%</td>
<td>10%</td>
<td>13%</td>
<td>0%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Contact for support regarding issues you may have with an electricity management program you have enrolled in</td>
<td>31%</td>
<td>0%</td>
<td>4%</td>
<td>12%</td>
<td>37%</td>
<td>11%</td>
<td>0%</td>
<td>3%</td>
<td>11%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Base: All respondents

In terms of receiving support, this constituted the only touchpoint for which online was not the most popular channel: 37 percent of participants selected “over the telephone” as their preferred choice. By contrast, 31 percent said they prefer to seek assistance online. This finding further underscores channel diversity—supporting the notion that consumers consider EE&C to be more complex and believe it requires live contact to work through troubleshooting. Moreover, these findings all point to the fact that energy providers should pursue multi-channel strategies to promote the widespread adoption of EE&C programs.

For energy providers to remain relevant in today’s fast-paced, technology-driven environments, they need to pursue new, innovative ways of interacting with consumers. Mobile applications offer one example; some energy providers in the United Kingdom have launched programs for mobile devices that enable users to monitor their electricity consumption remotely. These tools can change how consumers interact with their energy providers at existing touchpoints, such as support and billing, and open previously nonexistent touchpoints.

Another example lies with the point-of-purchase; this touchpoint offers another opportunity for energy providers to reshape interactions. Leading energy providers are examining the potential of partnering with major retailers to sell EE&C and electricity contracts or rebates as “bundles” when consumers purchase refrigerators, microwaves and other home appliances. However, the launch of these programs has been slowed by regulations that prevent energy providers from sharing consumer information with third parties. For energy providers to deliver on their energy-efficiency mandates, these kinds of regulatory issues should be reviewed and assessed.

Tap into social norms to influence consumer behavior

According to our survey, 60 percent of consumers feel a degree of social pressure to participate in environmentally friendly activities. The amount of pressure consumers report varies by segment. Those in the “Indifferents” and “Skepticals” segments reported feeling the least (58 percent and 50 percent, respectively). Those in the “Cost conscious” and “Eco-rational” groups claimed to feel the most (66 percent each). While the differences are not huge, they correlate to other behavioral and attitudinal factors displayed by the segments.

Not surprisingly, consumers who belong to segments that feel greater pressure are more likely to report that they will take a more positive view of an individual who enrolls in an electricity management program.
Learning from the financial industry's struggle with the online channel

More than a decade ago, as the Internet gained popularity, financial services companies pioneered the creation of online self-service that was trustworthy, easy and secure. As consumer comfort with online transactions grew, companies began to apply more products to their websites. Soon, consumers could get information, sign up and obtain support for a wide range of products, including mortgages and retirement savings plans. In the hope of driving more consumers to online channels—and reducing operating costs—companies began to close local branches. However, many companies found that without branches they were losing high-profit products, such as mortgages, not only to companies who kept their branches open but also to those who operated the in-person-at-home channel. Financial services companies soon concluded that some of their products are both too advanced and too personal to sell over the Internet; they require a trusted advisor. As the results of the Understanding Consumer Preferences in Energy Efficiency survey suggest, energy providers need to carefully consider their product portfolio and assess which products are best sold through in-person channels.
Eighty-three percent of the “Eco-rationals” and 73 percent of the “Cost conscious” segments agreed with this sentiment, while only 56 percent and 47 percent of the “Indifferents” and “Skepticals” segments, respectively, admitted to sharing this opinion. These findings suggest that regardless of segment, energy providers can leverage social pressures and perceptions to drive adoption of EE&C programs.

The power of social pressure and norms may be borne out by past environmental campaigns (such as the movement against littering), which have demonstrated how attaching a negative social stigma to a behavior can cause people to stop engaging in it. Similarly, many consumers incorporated recycling into their daily lives, in part as a result of marketing initiatives that placed those who recycle in a more favorable light than those who do not. Following this logic, energy providers can promote the uptake of desired behaviors by fostering positive social attitudes toward them. For example, some energy providers have successfully pioneered elementary school programs to encourage children to drive parental action in the home.

To that end, OPOWER is using psychological techniques pioneered by Arizona State University psychology and marketing professor, Bob Cialdini, who researched the optimal phrasing to use on hotel-room signs asking guests to reuse their towels. Instead of appealing to guests’ sense of environmental stewardship, hotels can achieve a higher rate of participation by invoking the behavior of other guests: “The majority of guests who stay in our hotel do reuse their towels.” OPOWER is now applying similar techniques to EE&C.

“Push” and “pull” consumers with a blend of marketing techniques

To build awareness and overcome consumers’ reluctance to adopt EE&C programs, our findings suggest that a balance between “push” and “pull” strategies may be the most effective approach. Energy providers that are successful at “pushing” awareness and education on consumers can then pursue “pull” strategies at signup. Unlike “push” strategies, which create demand by selling directly to consumers, “pull” strategies are designed to make consumers ask for the programs they are being enticed to sign up for (see Figure 9).

The combination of “push” and “pull” strategies necessary to drive the uptake of EE&C programs will be unique to each energy provider and will evolve with consumers’ needs and preferences.

Harnessing social signals to help drive EE&C results

- OPOWER has achieved 1.5 to 3.5 percent in average energy savings across an entire targeted population.6
- Customers who receive peer-to-peer comparisons cut their energy consumption by 1.2 to 2.8 percent, on average, studies have found.7
- OPOWER spends about 3 cents to save a kilowatt hour of electricity. Building a new coal plant to generate that same kilowatt would cost 5 to 6 cents, wind would cost 10 to 12 cents and solar can be as high as 25 to 30 cents.8
- A Massachusetts Institute of Technology/New York University study concluded, “Giving consumers feedback on their consumption, providing information on energy savings opportunities, comparing their use to their neighbors’, facilitating public or private goal setting, and structuring commitment devices have caused households to reduce energy consumption by 5 to 20 percent.”9
- Utilizing social norms such as “saying thank you” and “making it fun” can influence consumer behavior.
Using language to make EE&C more accessible

Many consumers have difficulty understanding the terms used to describe their electricity consumption and its environmental consequences. Often, they are unsure how much electricity is in a kilowatt hour or how many kilowatt hours generate a tonne of carbon dioxide. Providers need to make these units of measure comprehensible; for example, by using them to demonstrate a reasonable level of electricity consumption. This strategy has been used to turn other formerly obscure metrics into meaningful points of reference. In the fight against obesity, the calorie gained significance when daily intake and foods were reinterpreted using caloric values.

Straightforward language also enables energy providers to make more effective use of existing touchpoints, such as billing, to communicate with consumers.
Evolve to a sales-focused operating culture

The nature of EE&C programs will force energy providers to transition from service-focused to a service- and sales-focused operating model. These programs will require providers to use innovative channels and strategic partnerships to reach the right customers at the right times. Meanwhile, providers will need a stronger sales-like culture to engage consumers in a two-way dialogue that builds trust, strengthens the brand and uncovers new opportunities for innovation and growth. Critical to success is understanding which channels should be used for which interactions.

Given the ongoing change in consumer priorities, imperatives and offerings, energy providers should look to an enhanced campaign and program management capability for marketing their portfolios of products and services. To influence consumer behavior, companies need to bundle and market products, services and pricing mechanisms that address each consumer segment’s specific needs. Consumer-centric marketing will automate key campaign execution functions, where possible, and support a more targeted approach. The ability to measure and continually enhance campaign effectiveness will become a key driver of operational efficiency.

Consumer insights to lower cost-of-adoption

A large energy provider with more than 9 million customers and revenues of $11 billion was facing a need to achieve aggressive demand-management and energy-efficiency targets. These challenges were compounded by high marketing costs and a low adoption rate for energy-efficiency programs. The energy provider used consumer insights to help it identify and influence green-minded customers. The campaign based on these insights generated a 270-percent increase in adoption rates for the client’s energy efficiency program, and also delivered a reduction of 70 percent in sales and marketing costs—saving the company more than $300 million altogether.
4. Delivering the experience:
Engage new energy consumers through tailored offerings

EE&C programs are not commodities. Energy providers need to evolve into trusted advisors offering tailored products, services and support.
While most energy providers have sold power or gas as a commodity product, their traditional—and simple—go-to-market approach is not appropriate for a broad range and combination of EE&C products and services. Energy providers who continue to approach customer interactions with a primarily reactive approach are unlikely to reap the benefits of a trusted consumer relationship. Instead, energy providers should organize their core customer operations around consumer engagement to strengthen trust, create tailored offerings and continually address consumer needs throughout the life cycle of every product and service.

**Foster consumer trust and confidence**

Building trust among end consumers is the first step toward successfully creating and delivering the EE&C “brand promise” and consumer experience. To date, most energy providers have failed to establish high mass-market adoption rates for EE&C programs, in part due to a lack of consumer trust and confidence. Trust is fundamental to engaging consumers, encouraging them to purchase nontraditional offerings and convincing them to adjust their daily routines accordingly. Furthermore, we believe the complexity of EE&C programs has slowed consumer adoption. Quite simply, consumers struggle to understand the tangible and intangible benefits.

The results of our *Understanding Consumer Preferences in Energy Efficiency* survey demonstrate the extent to which trust influences consumer actions. Despite rating energy providers above environmental associations, academic institutions and consumer groups as their preferred point of contact for general information and customized advice on electricity management programs (see Figure 10), respondents reported that they place less trust in energy providers than in these organizations when it comes to informing them on actions to optimize electricity consumption (see Figure 11). When end consumers do not trust their energy providers, they may turn to other organizations first for help in making electricity conservation decisions.

---

**Figure 10.**
Who would be your first choice to deal with/be in contact with regarding each of the following situations?

<table>
<thead>
<tr>
<th>Situation</th>
<th>Government/governmental organizations</th>
<th>Consumer associations</th>
<th>Utilities/electricity providers</th>
<th>Environmental associations</th>
<th>Home service providers</th>
<th>Academics/schools/scientific associations</th>
<th>Retailers/equipment manufacturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get general information on electricity management programs</td>
<td>8%</td>
<td>19%</td>
<td>53%</td>
<td>9%</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Get customized advice on the best electricity management programs for your situation</td>
<td>8%</td>
<td>8%</td>
<td>45%</td>
<td>8%</td>
<td>8%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Purchase or sign-up for an electricity management program</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Contact for support regarding issues you may have with an electricity management program you have enrolled in</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Base: All respondents
Figure 11.
What organizations do you trust to inform you about actions you can take to optimize your electricity consumption?

<table>
<thead>
<tr>
<th>Organization</th>
<th>Do not trust</th>
<th>Neither trust nor distrust</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental associations</td>
<td>11%</td>
<td>36%</td>
<td>53%</td>
</tr>
<tr>
<td>Academics/schools/scientific associations</td>
<td>7%</td>
<td>42%</td>
<td>51%</td>
</tr>
<tr>
<td>Consumer associations</td>
<td>8%</td>
<td>43%</td>
<td>49%</td>
</tr>
<tr>
<td>Utilities/electricity providers</td>
<td>25%</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>Government/governmental organizations</td>
<td>28%</td>
<td>46%</td>
<td>26%</td>
</tr>
<tr>
<td>Online service providers (e.g., Google, Microsoft)</td>
<td>14%</td>
<td>66%</td>
<td>20%</td>
</tr>
<tr>
<td>Retailers/equipment manufacturers</td>
<td>27%</td>
<td>60%</td>
<td>13%</td>
</tr>
<tr>
<td>Home service providers (e.g., cable television provider, telecommunications provider, home security company, etc.)</td>
<td>28%</td>
<td>59%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Base: All respondents

Energy providers should carefully plan and execute tailored awareness and education programs to strengthen confidence and trust. Energy providers need to reach and engage consumers through new collaborative partnerships with other influential organizations. Working with stakeholders to educate consumers will help foster trust. Media and consumer advocacy groups have cast a watchful eye on smart metering and EE&C deployments and the resulting impacts to consumers. Thus, partnerships and education programs may also enable providers to overcome the “intrusiveness” that some consumers associate with EE&C programs.

Become a trusted advisor

Energy providers can gain consumer trust by consistently delivering on standard expectations and increasing transparency into the organization. Consumers have a hierarchy of needs that influences their reasoning. At minimum, they expect reliable power and accurate bills. Smart meter installation has a transformational impact on standard back-office billing processes. Consequently, energy providers must focus on retaining consumer trust through accurate billing and minimal service disruptions before working to further build the trusted advisor relationship.

As they achieve higher tiers of service performance, energy providers are able to realize progressively greater levels of consumer confidence and loyalty. A recent survey of utilities executives by the Economist Intelligence Unit illustrates that reliability and customer service are the factors that executives perceive as most important in influencing consumers’ purchasing decisions (see Figure 12).

To generate greater trust among consumers, providers need to offer greater transparency and increase interactions. Social media should be considered as part of the strategy. Social media channels continue to permeate consumers’ everyday lives and are becoming more easily accessible through mobile applications and technology. For example, energy providers can use forum functions to encourage consumers to provide feedback on products and services, and to demonstrate actions being taken in response to their comments. This strategy plays to consumers’ tendency to place greater confidence in organizations that clearly demonstrate a focus on catering to their needs and preferences. Of course, by nature social media also present some risks; information dissemination is immediate and widespread. Given this lack of control, energy providers must think carefully about the operating model required to support social media.

Finally, it is important to note that participation in EE&C programs does not guarantee reduced electricity consumption or reduced bills. Indeed, it is possible for consumers to use more energy or see an increase in their bill due to time of use or critical-peak pricing. Setting false financial expectations may result in a backlash—undermining the trusted
Align offerings to consumer needs, preferences and values

To succeed, energy providers must address consumers’ differentiated needs, preferences and ideas of “value” when making EE&C decisions. Our study, Understanding Consumer Preferences in Energy Efficiency, found that when asked to choose between differing aspects of electricity management programs, participants usually selected the one offering greater cost savings. However, the extent to which cost influences consumers’ adoption decisions varies considerably among consumer segments. The value of these programs extends beyond cost savings to other benefits consumers can realize by adopting them; examples include a reduction in their ecological footprints, recognition within the community or a feeling of proactively managing personal energy usage. The challenge for energy providers lies in establishing a method of consistently quantifying—and reflecting the relative value of—these program benefits.

End consumers who already invest in environmentally friendly products and services are likely to accept significant upfront costs in exchange for long-term benefits. Consumers who have yet to buy such products may find it difficult to appreciate this trade-off. As a result, energy providers must carefully consider how to position EE&C programs for each segment and then deliver against promised benefits.

Address consumer values throughout the product and service life cycle

Energy providers must align product and service development to reflect diverse consumer values. Energy providers have achieved limited success conceiving and delivering the products, services and pricing mechanisms needed to influence consumer behavior. To date, basic EE&C programs—such as compact fluorescent light bulbs and product rebates—have not required energy providers to change how they operate. To incorporate consumers’ needs and preferences into all stages of the product and service life cycle—from creation and testing to retirement—providers must adjust their existing operating structures so that consumers are central to decision making (see Figure 13). Doing so will enable energy providers to tailor new offerings and services to consumers’ needs and preferences. It also positions energy providers to more effectively manage a portfolio or suite of products and services.

Within the product and service life cycle, energy providers must not overlook the retirement capability. More often than not, providers retain tariff structures and programs well beyond their “useful” life with little regard for transitioning consumers...
Redefine customer operations to meet consumer expectations

With tailored products and services comes the need for a more differentiated service experience. According to the Accenture report, *Start Making Sense: Defining Customer Experiences that Enable High Performance* (2009), the support experience has the greatest influence on consumer satisfaction—and consumer expectations are increasing. For most consumers, a positive support experience includes the following elements:

- Convenient access to information or agent
- Delivery of useful information
- Timely resolution

To deliver all three elements, energy providers should center their customer service functions on consumer needs and preferences. One way energy providers can provide customized support is by identifying the channels best suited to consumers. For example, tech-savvy consumers may have a preference for online assistance, while others may opt to receive guidance over the telephone. Tailoring the service experience to the consumer is the final building block toward the trusted advisor relationship.

To support a differentiated experience, energy providers must adjust their operations to cater to consumers’ unique expectations. Moreover, they also must maintain a rigorous focus on energy-management service design and delivery. An end-to-end approach for product life-cycle management will enable energy providers to design, develop, test, launch and maintain sophisticated portfolios of products and services. Energy providers that successfully create and deliver a differentiated consumer experience will achieve EE&C success.

Combinations of new consumer-focused products and services will likely have a significant impact on energy providers—particularly in the design and launch of new programs that demand a fundamental shift in the daily activities of meter-to-cash operations. Moreover, with the advent of new and rapidly evolving products and services, energy providers will be challenged to continually adapt to the greater complexity in core meter-to-cash consumer operations processes.
Case study: Expanding the product offering

Vattenfall has completed the rollout of smart meters to 100 percent of households across Sweden and Finland, enabling the development of new services and technologies. The application of smart and energy-saving technologies in households is raising awareness of energy use among residents, contributing greatly to reductions in emissions and personal energy expenses. For example, one of Vattenfall's latest projects is a customer information pilot (CIP) that allows customers to visualize consumption and other information on a web page. Through the CIP, Vattenfall plans to provide:

- High-resolution consumption statistics in graphs, tables and spreadsheets, based on hourly values.
- Historical consumption values (daily).
- Daily average temperature for the consumer’s city.
- Outage information.

Conclusion:
Achieving outcomes through consumer-centricity
To support a competence in consumer energy support, successful energy providers will redefine their energy consumer strategy, technological and consumer insight capabilities, workforce competencies and core customer operations processes. The net result will be an energy-management experience that is tailored, insight driven and responsive to dynamic consumer challenges.

Tackle today’s challenges and build tomorrow’s capabilities

To be sure, the stakes are high. Achieving mass-market adoption of EE&C programs at scale presents different challenges from those that energy providers—regulated and deregulated alike—have faced in the past.

Today, providers are challenged to:

Engage consumers as partners in the journey
Whether the impetus for change comes from within, from regulators, from consumers or from competitors, energy providers should not take a “wait-and-see” approach. Up to two-thirds of all smart metering and energy-efficiency business case benefits depend on achieving some level of consumer change. Failing to manage the transition and serve consumers appropriately can result in delays and significant benefits “leakage” over time.

Navigate the social challenge
Consumer resistance can stop even the largest smart metering deployment in its tracks. Success hinges on addressing the social aspects of EE&C adoption. Providers need to understand and harness the potential of social marketing, social pressure, social media and wider societal change.

Manage change while maintaining service
Energy providers must design and transition to their future consumer strategy, customer operations and EE&C programs without disrupting current services. Poorly executed smart metering deployment or ill-conceived EE&C programs threaten to reverse years of gains in the efficiency and effectiveness of customer operations, and could ultimately damage cost-to-serve and customer satisfaction.

While strategic priorities will vary, every energy provider faces challenges around establishing a consumer energy support competence. Given the pressure to deploy smart metering and EE&C programs with limited service disruption, energy providers must embrace a methodical transformation program. They need a holistic, integrated roadmap for designing, deploying and operating EE&C and metering pilots. And they must address the downstream impacts of EE&C and smart metering.

As interest and momentum increase for consumer-oriented energy-efficiency programs, renewable options and demand-response capabilities, many energy providers must rethink their traditional service models and operational capabilities. Consumers will need and expect far more sophisticated service and support. Ultimately, energy providers must demonstrate true consumer-centricity by transforming their customer operations.
deployments across people, processes and technology. Only then can they transition to fully scalable customer care operations that help energy providers achieve high performance while enabling these critical capabilities:

**Actionable consumer segmentation and insight**
The ability to segment consumers on nontraditional factors, such as attitudes, behaviors and values, and to draw conclusions that enable development of targeted EE&C offerings.

**Consumer-centric marketing and multi-channel management**
The ability to effectively refine and target marketing to the segment and/or individual energy consumer while leveraging existing and emerging channels.

**Energy-management service design and delivery**
The ability to design, develop and deliver innovative energy-management services that achieve consumer adoption, regulatory compliance and other business objectives.

**Target near-term results**
As energy providers deploy smart metering and prepare for more advanced EE&C pricing and program availability, many are struggling to communicate the value to end consumers. Given the current state of most energy providers’ smart technology capabilities and maturity, Accenture believes the following near-term tactical priorities have the potential to yield immediate benefits:

**Maintain a focus on large commercial and industrial (C&I) customers**
For the typical energy provider, well over half of all generated electricity supports a small customer base of large commercial and industrial clients. Many providers have mature account management capabilities and energy-efficiency practices in place for this group of customers—but there is still room to grow. From “smart buildings” to advanced demand-response energy-management incentives, opportunities abound. High-performance businesses will work to leverage them.

**Industrialize energy-efficiency programs for small and medium-size businesses**
Energy providers can gain immediate traction with this sector by applying lessons learned from C&I. Although providers have traditionally overlooked small and medium-size businesses for energy efficiency, they have an opportunity to grow by tapping into these businesses’ latent interests. Furthermore, establishing popular EE&C programs provides a foundation for building a stronger footprint within local communities, creating community-based advocates and targeting a certain segment of the mass market.

**Build mass-market awareness**
Broad, mass-market EE&C awareness represents the “last frontier.” Mass-marketing campaigns for residential customers will be a key first step in
building awareness and trust. Energy providers can start with an immediate focus on partnering with public sector organizations on differentiated educational campaigns to reach many of the more positively disposed consumers. Outreach programs with schools, community organizations and consumer associations can further build broad awareness.

Establish mass-market touchpoints
For greater access to consumers, energy providers can start by partnering with point-of-purchase retailers that offer strong consumer channels. Energy providers should collaborate with home retailers, marketing and third-party service providers that have more experience in consumer marketing and channel management.

Sell to and serve the optimal segments
Targeting the "top tier" of customer segments who are already predisposed to EE&C—that is, those who are informed, willing and able, and have a measurable level of discretionary usage to manage—can result in a highly cost-effective campaign. Representing an average of 20 to 40 percent of the residential population, these residential consumers are not homogenous. Thus, energy providers must carefully differentiate through tailored products, services and channels. Focused programs that sell specifically to these subsets of the consumer base will likely yield the best results at the lowest cost-to-adopt.

Summary
A new, more active energy consumer is emerging. For energy providers, this consumer presents myriad challenges that must be addressed within customer operations. Energy providers that will advance in the journey to high performance recognize that simply installing smart metering devices and in-home displays will not drive lasting consumer adoption. They understand that much more is required to achieve their EE&C mandates. Those that embrace the capabilities necessary to address adoption and subsequent challenges to customer operations will be more successful in the longer term.

To achieve scalable and sustainable success, energy providers must take a prudent approach to their smart meter and EE&C transformation. They must develop a holistic, integrated strategy and roadmap centered on a core competence in consumer energy support. And they must take a methodical approach to change and program management to adapt customer operations with minimal service disruption. Ultimately, to realize greater long-term value—and achieve high performance—energy providers must plan and adjust their implementation according to the impacts on the people, processes and technology within customer operations.
About Accenture’s customer operations for utilities group

Accenture has been working with water, electricity and gas clients around the world for more than 40 years. Today, our utilities group includes more than 7,500 people who have worked with over 210 utilities in over 43 countries, including many of the world’s largest and most innovative industry leaders. Further, we own and operate our own utilities organization on behalf of more than 30 outsourcing clients, processing over 100 million customer transactions each year. Through consulting, systems integration and outsourcing arrangements, Accenture helps clients advance in their journey to achieving high performance.

Accenture brings broad and well-established smart metering customer transformation capabilities in four areas:

1. Consumer and operations strategy
2. Consumer-centric operations
3. EE&C adoption and analytics
4. Systems integration and technology deployment

Accenture helps our clients through the disruptive, complex challenges of creating scalable, sustainable smart metering and demand-management solutions. We have helped clients design, transition and run smart metering operations across the full spectrum of meter-to-cash customer care. Accenture also has helped clients develop new, customer-oriented programs to support demand-side management and EE&C programs. In so doing, we use advanced customer relationship management capabilities supported by innovative customer segmentation and insight techniques. With a focus on systems integration, operational transformation and customer-oriented programs, Accenture offers an integrated approach to driving overall customer value for smart metering.

Endnotes

1. Please refer to Glossary for energy provider definition.
2. Energy efficiency and conservation (EE&C) includes demand-side management and demand-response programs. See Glossary for definitions.
4. Accenture research and experience.
Glossary

Consumer-centricity
Consumer-centricity is the concept of placing consumers at the heart of energy providers' decisions and operations. Consumer-centric companies are structured to incorporate consumers' needs and preferences into all levels of decision making across all operating groups.

Consumer energy support
Consumer energy support refers to a consumer-centric core competence of improving how energy providers sell, serve and support EE&C programs.

Consumer insight
Consumer insight refers to the consumer-centric core competence of understanding consumers' needs and preferences through direct tactics (for example, interviews) and indirect tactics (for example, consumer analytics).

Consumer/customer operations
This term refers to the capabilities that enable energy providers to deliver services, products and messaging to consumers. It includes such functions as marketing, sales, customer care and consumer insight.

Core competence
A core competence is a company's expertise in a subject area or skill set that is central to its value proposition.

Cost-to-adopt
Cost-to-adopt is the dollar amount that an energy provider must invest to persuade a consumer to sign up for a demand-side management program.

Cost-to-serve
Cost-to-serve is the operational cost associated with servicing a consumer. This includes costs from the front and back offices of customer care.

Customer care
Customer care is an energy provider's service arm. It includes standard front-office and back-office meter-to-cash processes, such as meter reading and telephone support.

Demand response
Demand-response programs ask consumers to manage their energy usage within a specific time frame in response to supply conditions, such as times of potential system instability or high market prices. Demand-response programs form part of the wider demand-side management umbrella, which also includes EE&C programs. An example of a demand-response program is temporarily raising hourly rates at a time of high demand.

Demand-side management (DSM)
Demand-side management requires consumers to manage their energy consumption to match supply conditions (demand response) or optimize their overall existing usage patterns (EE&C).

Energy efficiency and conservation (EE&C)
Energy efficiency and conservation refers to programs designed to optimize the general usage patterns of consumers over time. EE&C programs do not necessarily require consumers to change their behaviors but involve the installation of a new technology or implementation of a new process. Home insulation and fluorescent light bulbs are examples of EE&C technologies.

Energy providers
Energy providers describes companies that supply commercial, industrial and residential consumers with electricity. These include vertically integrated utilities, retailers and energy service companies in regulated and deregulated markets.

Meter-to-cash
Meter-to-cash is the end-to-end process from reading consumption to generating a bill and collecting payment.

Pull marketing strategy
Pull marketing strategies build up demand for a product or service, which results in consumers "pulling" the desired product or service through the delivery channels. An example is when a company launches an advertising campaign for a product that causes consumers to request that product at a retailer. To generate demand, companies also can partner with third-party organizations, such as government, environmental and educational institutions.

Push marketing strategy
Push marketing is when companies create demand by promoting a product or service to generate awareness and ultimately drive sales. Email marketing and cold calling are examples of push marketing, since they "push" a product or service to target consumers who may or may not be aware of it.

Smart meters
Smart meters are electricity meters that can communicate remotely, bidirectionally and in near real time with an energy provider. Data captured and communicated by smart meters exceeds the traditional consumption information. For example, it can include fraud and theft signaling.

Social marketing
Social marketing uses the principles of commercial marketing to change consumer behaviors. However, unlike commercial marketing, its aim is social improvement rather than financial gain. Additionally, social marketing refers to companies using social media to market products and services to consumers. Wearing seatbelts and recycling are examples of everyday consumer behaviors instigated through social marketing.

Social media
Social media are online channels that tap into social networks to facilitate two-way communication between companies and consumers. Companies can use social media to create brand awareness, promote products and services and gain consumer trust. Examples of social media include social networking sites, as well as blogs and chat rooms.
About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 181,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world’s most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$21.58 billion for the fiscal year ended Aug. 31, 2009. Its home page is www.accenture.com.