Understanding Consumer Preferences in Energy Efficiency

Accenture end-consumer observatory on electricity management 2010
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td><strong>Key Finding No. 1</strong></td>
<td>6</td>
</tr>
<tr>
<td>There is a significant contradiction between consumer perceptions and their actual knowledge of energy efficiency</td>
<td></td>
</tr>
<tr>
<td><strong>Key Finding No. 2</strong></td>
<td>12</td>
</tr>
<tr>
<td>Consumers’ first instinct is to contact utilities/electricity providers for energy-efficiency activities, but providers still need to build trust and credibility</td>
<td></td>
</tr>
<tr>
<td><strong>Key Finding No. 3</strong></td>
<td>16</td>
</tr>
<tr>
<td>While price remains a key factor to adoption, the extent of the utilities’/electricity providers’ control over energy use has emerged as a potential barrier</td>
<td></td>
</tr>
<tr>
<td><strong>Key Finding No. 4</strong></td>
<td>22</td>
</tr>
<tr>
<td>Channels and contact points for utilities/electricity providers to communicate with consumers are diverse</td>
<td></td>
</tr>
<tr>
<td><strong>Key Finding No. 5</strong></td>
<td>26</td>
</tr>
<tr>
<td>Adoption of electricity management programs is influenced by fragmented and nontraditional consumer preferences</td>
<td></td>
</tr>
<tr>
<td><strong>Implications for utilities/electricity providers</strong></td>
<td>32</td>
</tr>
</tbody>
</table>
“Those utilities that understand and leverage the perceptions, behaviors and values of their consumers will ultimately generate the most value in the new energy era. By presenting a compelling and convenient value proposition, energy providers and consumers alike will be rewarded by lasting energy efficiency.”

Greg Guthridge, managing director, Accenture Retail and Business Services for Utilities
Introduction

Accenture set out to understand consumer opinions and preferences toward electricity management programs by answering six core questions:

1. Do consumers have a clear understanding of the impact of electricity consumption on the environment?

2. Do they understand how they can optimize their electricity consumption?

3. Do they feel social pressure to do so?

4. Which organizations do they trust to inform them about actions they can take to optimize their electricity consumption?

5. Are they aware of electricity management programs?

6. What are the drivers and barriers to adoption of electricity management programs?

To answer these questions and reflect our commitment to helping companies become high-performance businesses, Accenture commissioned a survey of consumers’ attitudes and opinions toward electricity management programs. The study was conducted in 17 countries with 9,108 individuals making this research one of the most comprehensive global studies to date.

The findings provide new insights into consumers' perceptions of their own energy consumption, readiness and willingness to take action.
Methodology and sample

Our quantitative global survey of consumers’ opinions and preferences toward electricity management programs is based on a 20-minute survey of 9,108 individuals across 17 countries. It was conducted online in native languages during January 2010.

The survey probed consumer attitudes toward electricity management programs by asking attitudinal and behavioral questions about electricity consumption, as well as demographic questions. The survey also presented choice-based questions about various combinations of four key components of electricity management programs. The information was evaluated using a conjoint analysis to understand how much consumers weight each component of a program in their adoption decision, to probe consumer preferences among different options and to segment them according to their preferences.

The survey sample was representative of the general population, in terms of gender, age and income in every country, with the exception of Brazil, China and South Africa, where the sample was representative of the urban populations. Data collection was completed for Accenture by Harris Interactive.

Countries included in the survey, with numbers of participants

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>500</td>
</tr>
<tr>
<td>Brazil</td>
<td>518</td>
</tr>
<tr>
<td>Canada</td>
<td>500</td>
</tr>
<tr>
<td>China</td>
<td>500</td>
</tr>
<tr>
<td>Denmark</td>
<td>500</td>
</tr>
<tr>
<td>France</td>
<td>500</td>
</tr>
<tr>
<td>Germany</td>
<td>513</td>
</tr>
<tr>
<td>Italy</td>
<td>527</td>
</tr>
<tr>
<td>Japan</td>
<td>530</td>
</tr>
<tr>
<td>Netherlands</td>
<td>500</td>
</tr>
<tr>
<td>Singapore</td>
<td>501</td>
</tr>
<tr>
<td>South Africa</td>
<td>500</td>
</tr>
<tr>
<td>South Korea</td>
<td>500</td>
</tr>
<tr>
<td>Spain</td>
<td>500</td>
</tr>
<tr>
<td>Sweden</td>
<td>514</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>500</td>
</tr>
<tr>
<td>United States</td>
<td>1005</td>
</tr>
</tbody>
</table>
Key Finding No. 1
There is a significant contradiction between consumer perceptions and their actual knowledge of energy efficiency.
Consumers around the world are now strongly aware of climate change, but our research shows they still do not fully equate electricity usage with its environmental impact.

As Figure 1 illustrates, when asked to select the factors that, in their opinion, have a negative impact on the environment in their country, 85 percent highlight individual usage of gasoline and diesel. Only 42 percent cite individual electricity consumption, despite the fact that traditional fossil fuel-based power generation is a major producer of carbon emissions.

The country breakdown of consumer responses reveals interesting variations. Consumers in Denmark and Germany are most keenly aware that using electricity is environmentally damaging, with 59 percent of consumers in both countries expressing this view. At the other end of the scale, only 27 percent of consumers in Brazil and South Korea regard electricity consumption as damaging (see Figure 2).
A further gap between perception and reality emerges when we ask consumers how well they understand the ways they can optimize. As Figure 3 illustrates, a large majority of consumers claim they understand how to do this, with only 25 percent stating that their knowledge in this area is poor. Again, there are wide national variations, ranging from 86 percent in the Netherlands who say they understand how to optimize their power usage, to only 57 percent in Sweden (see Figure 4).
However, when we ask consumers whether they have heard of electricity management programs that help them optimize their electricity consumption, it emerges that only 28 percent know of programs that enable them to do this—well below the 75 percent who indicated that they understand how to optimize their electricity consumption (see Figure 5).

As illustrated in Figure 6, a global comparison shows the highest level of program awareness in Canada, where 38 percent of consumers know about electricity management programs, and the lowest in South Korea, where awareness is just 13 percent.

Figure 5.
Have you heard of programs that help you to optimize your electricity consumption (i.e., electricity management programs)?

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents

Figure 6.
Have you heard of programs that help you to optimize your electricity consumption (i.e., electricity management programs)?

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Even among consumers who have heard of electricity management programs, the majority—58 percent—still do not know if their own providers offer such programs (see Figure 7). Furthermore, of the total 66 percent who say they have heard about these programs, a mere 9 percent have actually enrolled in one. This low enrollment rate points to a high level of inertia even among those consumers who consider themselves well-informed.

Figure 7.
Do you know if your electricity provider offers electricity management programs for individuals?

<table>
<thead>
<tr>
<th>Option</th>
<th>Base: All respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have heard about them and know what they are</td>
<td>28%</td>
</tr>
<tr>
<td>I have heard about them but do not know what they are</td>
<td>38%</td>
</tr>
<tr>
<td>I have never heard about them</td>
<td>34%</td>
</tr>
</tbody>
</table>

Base: All respondents

Source: Understanding Consumer Preferences in Energy Efficiency

More positively, it seems consumers do want to learn about electricity management programs, and are open to considering them as an alternative. Of the one-third of consumers currently enrolled in an equalized payment plan, well over half would be willing to give up their plan to join an electricity management program (see Figure 8).

Figure 8.
Are you currently enrolled in an equalized payment plan where you pay the same amount each period?*

<table>
<thead>
<tr>
<th>Option</th>
<th>Base: All respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>33%</td>
</tr>
<tr>
<td>No</td>
<td>67%</td>
</tr>
</tbody>
</table>

Base: All respondents

Source: Understanding Consumer Preferences in Energy Efficiency

Would you be willing to give up your equalized payment plan to enroll in an electricity management program?

<table>
<thead>
<tr>
<th>Option</th>
<th>Base: Respondents currently enrolled in an equalized payment plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>59%</td>
</tr>
<tr>
<td>No</td>
<td>41%</td>
</tr>
</tbody>
</table>

Base: Respondents currently enrolled in an equalized payment plan

*The amount is based on your past consumption, with the difference between what you have paid and your actual consumption being paid or credited at the end of a specific time frame.

Base: All respondents

Source: Understanding Consumer Preferences in Energy Efficiency
Key Finding No. 2

Consumers' first instinct is to contact utilities/electricity providers for energy-efficiency activities, but providers still need to build trust and credibility.
Utilities/electricity providers are a strong first choice among consumers for general and customized advice and support on electricity management programs, for signing up for such a program and for support on existing programs they have joined (see Figure 9).

Figure 9.
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>Utilities/electricity providers</th>
<th>Consumer associations</th>
<th>Government/governmental organizations</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>53%</td>
<td>15%</td>
<td>10%</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>45%</td>
<td>19%</td>
<td>8%</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></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact for support regarding issues you may have with an electricity management program you have enrolled in</td>
<td>77%</td>
<td>77%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
However, the fact that consumers would first contact their providers does not necessarily mean they trust the advice they would receive. When asked which organizations they trust to inform them about actions to optimize their electricity consumption, consumers rate environmental, academic and consumer associations above utilities/electricity providers (see Figure 10). Overall, only 29 percent view utilities/electricity providers as trusted advisors.

**Figure 10.**
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>43%</td>
<td>46%</td>
</tr>
<tr>
<td>Academics/schools/scientific associations</td>
<td>7%</td>
<td>51%</td>
<td>42%</td>
</tr>
<tr>
<td>Consumer associations</td>
<td>8%</td>
<td>49%</td>
<td>43%</td>
</tr>
<tr>
<td>Utilities/electricity providers</td>
<td>25%</td>
<td>46%</td>
<td>29%</td>
</tr>
<tr>
<td>Government/governmental organizations</td>
<td>26%</td>
<td>46%</td>
<td>28%</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>

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
The countries where consumers express the highest level of trust in their utilities/electricity providers for information on optimizing electricity consumption are Singapore at 54 percent and China at 41 percent (see Figure 11). At the other end of the scale, the consumer populations with the lowest levels of trust are Germany (10 percent), Sweden (16 percent) and the United Kingdom (17 percent). These findings seem to indicate that commercially competitive energy markets tend to be below the average in terms of consumer trust, while countries with more regulated energy tend to be above the average.

Figure 11.
Do you trust your utilities/electricity providers to inform you about actions you can take to optimize your electricity consumption?

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Key Finding No. 3

While price remains a key factor to adoption, the extent of the utilities'/electricity providers' control over energy use has emerged as a potential barrier.
While consumers claim to be willing to enroll in electricity management programs, further questioning reveals that this willingness has its limits. Specifically, consumers are not inclined to change their behavior to optimize their energy usage if it increases their electricity bill.

Asked which factors would most discourage them from using electricity management programs, 46 percent cite an increase in their electricity bill, and 41 percent cite a situation in which the electricity they save is sold by their utilities/electricity providers for a profit (see Figure 12).

Figure 12.
Which factors would most discourage you from using electricity management programs?

<table>
<thead>
<tr>
<th>Top three factors</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would increase the amount of my electricity bill</td>
<td>46%</td>
</tr>
<tr>
<td>Knowing that the electricity I am saving is being sold by my electricity provider for a profit</td>
<td>41%</td>
</tr>
<tr>
<td>It would allow electricity providers greater access to my personal electricity consumption data</td>
<td>32%</td>
</tr>
<tr>
<td>It would require me to change my entertainment choices</td>
<td>32%</td>
</tr>
<tr>
<td>It would require me to decrease the level of comfort in my home</td>
<td>30%</td>
</tr>
<tr>
<td>It would have no positive impact on my environmental impact</td>
<td>29%</td>
</tr>
<tr>
<td>It would make my electricity bills more complicated</td>
<td>24%</td>
</tr>
<tr>
<td>It would increase the time required to manage my electricity usage</td>
<td>24%</td>
</tr>
<tr>
<td>It would require me to learn how to use a new technology</td>
<td>12%</td>
</tr>
<tr>
<td>Knowing that I am already one of the lowest electricity users in my neighborhood</td>
<td>11%</td>
</tr>
</tbody>
</table>

*All factors appeared among respondents' top three factors
Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Conversely, cost also can be a factor in encouraging adoption of new energy-conserving behaviors. As Figure 13 illustrates, 88 percent of consumers say a lower energy bill would encourage them to enroll in an electricity management program, followed by 66 percent who would be encouraged by a reduction in their own environmental impact, and 51 percent by better control over the heating and cooling in their homes.

Further responses highlight the differing weight consumers attach to the various components influencing their decision over whether to enroll in an electricity management program. As Figure 14 shows, the "impact on electricity bill" receives the greatest weight at 38 percent. Surprisingly, "utility control" receives almost the same weight, at 37 percent. The opportunity to reduce individual environmental impact is weighted at 17 percent, and the degree of self-action required to manage energy usage registers only 8 percent.

**Figure 13.** What factors would most encourage you to use electricity management programs?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would decrease the amount of my electricity bill</td>
<td>88%</td>
</tr>
<tr>
<td>It would decrease my personal environmental impact</td>
<td>66%</td>
</tr>
<tr>
<td>It would allow me to better control the heating/cooling in my home</td>
<td>51%</td>
</tr>
<tr>
<td>It would decrease the time required to manage my electricity use</td>
<td>38%</td>
</tr>
</tbody>
</table>

*All factors appeared among respondents’ top three factors
Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents

**Figure 14.** When consumers make decisions regarding electricity management programs, they place different levels of importance on the components.

- **Impact on your electricity bill**
  You may take personal actions such as turning off appliances and equipment or allowing your electricity provider to remotely control equipment to reduce your electricity bill.

- **Utility control**
  You may agree to allow your electricity provider to remotely reduce and limit the use of specific appliances and devices in your home at specific times of the day.

- **Your environmental impact**
  Changing when and how much electricity you use may reduce your environmental impact.

- **Self-action required**
  Your electricity provider may alert you at various times of the day of high electricity-demand situations and you may or may not choose to take actions that interrupt your daily routine for up to one minute each time.

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Methodology note: Results based on a conjoint analysis
Our research reveals interesting variations among consumer responses in different countries. In South Korea, “impact on electricity bill” accounts for 51 percent of the decision to enroll in an electricity management program, while the “utility control” accounts for only 16 percent. At the other end of the spectrum, in the Netherlands “utility control” accounts for 53 percent, while the “impact on electricity bill” accounts for only 27 percent (see Figure 15).
There is an inverse relationship between consumer adoption of electricity management programs and utility control of home appliances. Consumers are more likely to sign up for a program where utilities/electricity providers cannot remotely limit the use of any home appliances (See Figure 16).

Figure 16. Impact of utility control on program adoption rates.

% of sign up (certainly + probably)

- Your electricity provider cannot remotely limit the use of any appliances: 35%
- Your electricity provider can remotely limit the use of certain major home appliances, but you can choose to reverse this course of action: 23%
- Your electricity provider can remotely limit the use of certain major home appliances and you cannot choose to reverse this course of action: 16%

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Methodology note: Simulation tested with "no self-action required," "no reduction of environmental impact" and "no impact on your electricity bill" components
There is a limited degree of elasticity between "impact on the electricity bill" and "utility control." No matter the impact, consumers are more likely to sign up if they retain some control over their home appliances. Also, when consumers are provided with some control over their home appliances, they are more likely to respond to the incentive of saving money (see Figure 17).

Figure 17.
Utility control versus bill savings.

Option 1: Your electricity provider can remotely limit the use of certain major home appliances and you cannot choose to reverse this course of action

% of sign up
(certainly + probably)

% of saving in electricity bill

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Methodology note: Simulation tested with "no self-action required" and "no reduction of environmental impact" components
Key Finding No. 4

Channels and contact points for utilities/electricity providers to communicate with consumers are diverse
Traditionally, utilities/electricity providers have answered customer inquiries via telephone. For electricity management programs, the findings highlight that consumers rank the internet as a top channel for all interactions. “In person at your home” has emerged as the second choice for information, advice and sign up, while “over the telephone” continues to be the key channel for support (see Figure 18).

**Figure 18.**
What would be your first choice to do each of the following?

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

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
With regard to the most convenient time for consumers to learn about electricity management programs, the option favored by 37 percent of consumers is to receive information along with their regular bills (see Figure 19). Consumers opt for a broad array of other timing options, such as when signing up for an electricity service, paying the bill, shopping for appliances or contacting the provider with questions.

**Figure 19.**
When is it most convenient for you to learn more about electricity management programs?

- When you receive your bill: 37%
- While signing up for your electricity service for your new home: 15%
- When you pay your bill: 12%
- When shopping for your new home appliances: 10%
- When you contact your electricity provider with questions on your bill: 9%
- While getting a home inspection for your new home: 3%
- When shopping for home renovation supplies: 3%
- When finding a contractor to make renovations in your home: 3%
- When finding financing for your new home purchase: 2%
- While finding a real estate agent for the purchase of your new home: 2%
- Other: 4%

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Key Finding No. 5

Adoption of electricity management programs is influenced by fragmented and nontraditional consumer preferences
Consumers’ readiness to enroll in electricity management programs is determined by a range of preferences that go well beyond the criteria traditionally applied to energy purchasing decisions. By analyzing and grouping the importance that consumers attach to the various aspects of electricity management programs, we have identified six distinct consumer segments, each with its own differentiated preferences and behaviors.

As Figure 20 shows, we have termed these six segments Proactives, Eco-rationals, Cost conscious, Pragmatics, Skepticals and Indifferents, reflecting the attitudes of each grouping toward electricity management programs. Each segment accounts for a significant slice of the global consumer population—ranging from 12 percent (Eco-rationals) to 21 percent (Skepticals and Pragmatics).

Figure 20.
Six consumer segments have been identified according to their preferences for the different components of electricity management programs.

Electricity management program components:
- Impact on your electricity bill
- Utility control
- Your environmental impact
- Self-action required

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Methodology note: Results based on a conjoint analysis
These segments are present in every marketplace surveyed (see Figure 21).

Figure 21.
Geographic representation of the six segments.

<table>
<thead>
<tr>
<th>Country</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>Brazil</td>
<td>33%</td>
<td>16%</td>
<td>10%</td>
<td>18%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Spain</td>
<td>25%</td>
<td>17%</td>
<td>15%</td>
<td>9%</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>South Africa</td>
<td>19%</td>
<td>15%</td>
<td>19%</td>
<td>24%</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>France</td>
<td>18%</td>
<td>15%</td>
<td>11%</td>
<td>30%</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>Sweden</td>
<td>18%</td>
<td>13%</td>
<td>19%</td>
<td>14%</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>16%</td>
<td>5%</td>
<td>13%</td>
<td>28%</td>
<td>27%</td>
<td>11%</td>
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Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Methodology note: Results based on a conjoint analysis
As their names suggest, each of these segments is influenced by different personal preferences when choosing whether to enroll in an electricity management program. The various attributes and characteristics are summarized in Figure 22.

### Figure 22.
Segments, adoption attributes and demographics.

#### Proactives (16%)

**Adoption attributes:**
- Highest willingness to take action to reduce the use of major appliances in their home
- Lowest interest in the reduction of their impact on the environment
- Higher preference for in-person contact at their home to get general information about electricity management programs

**Demographics +:**
- Higher proportion use electricity to heat their home

#### Eco-rationals (12%)

**Adoption attributes:**
- Highest interest in the reduction of their impact on the environment
- Higher impact of social pressure to drive them to take action
- Highest positive perception of a person having enrolled in an electricity management program
- Higher willingness to decrease level of comfort but remain sensitive to savings in their electricity bill
- Higher interest in energy-efficiency products and services such as smart meters, solar panels, renewable energy, home-energy packages, loyalty programs or technology recycling

**Demographics +:**
- More often women
- Often seek advice before purchasing and are ready to pay more for quality products

#### Cost conscious (17%)

**Adoption attributes:**
- Highest sensitivity to electricity bill savings
- Higher impact of social pressure to drive them to take action
- Higher positive perception of a person having enrolled in an electricity management program
- 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
- Higher level of trust toward utilities/electricity providers

**Demographics +:**
- More often women

#### Pragmatics (21%)

**Adoption attributes:**
- Lower acceptance of utility control
- Higher sensitivity to electricity bill savings
- More ready to switch products and brands
- Less prompt in adopting new technologies

**Demographics +:**
- More often men

#### Skepticals (21%)

**Adoption attributes:**
- Lowest acceptance of utility control
- Lowest trust toward utilities/electricity providers
- Lower sensitivity to electricity bill savings
- Lowest sensitivity to social pressure
- More likely to seek advice with consumer associations to get some information about electricity management programs

**Demographics +:**
- Higher income
- Higher proportion use natural gas to heat their home

#### Indifferents (13%)

**Adoption attributes:**
- Lowest willingness to take action to reduce the use of major appliances in their home
- Higher acceptance of utility control
- Lower proportion believe electricity has a negative impact on the environment
- Lower proportion think they understand enough about the actions they can take to optimize their electricity consumption
- Potential inhibitors would be the bill complexity and time commitment

**Demographics +:**
- More often men
- Below 24 years old
- Lower income
- The proportion of early adopters of new technologies and new trends is the highest in this segment

Source: Understanding Consumer Preferences in Energy Efficiency
Base: All respondents
Methodology note: Results based on a conjoint analysis; significant differences from the average have been highlighted
To enable broad adoption, energy-efficiency programs will need to deliver unique value propositions for each segment. Programs that enable efficient use of energy will need to be simple, convenient, intuitive and accurate.
Despite their divergent viewpoints, consumers in every segment say social pressure is a key driver to take action. Two-thirds of Eco-rationals indicate they are driven to action by social pressure. Even among the Skepticals, 50 percent of respondents agree that the attitudes of friends, family and colleagues are a key driver to take action (see Figure 23).

Consumers in nearly all segments, with the sole exception of the Skepticals, say they have a higher opinion of someone who enrolls in an electricity management program (see Figure 24). Overall, nearly two-thirds of consumers take a positive view of someone joining an electricity management program.

The findings suggest that adoption of electricity management programs may be increased by tapping into social pressure.
Our findings illustrate that consumer behaviors for energy-efficiency solutions are highly complex with broad diversity in perceptions, attitudes and preferences. For utilities/electricity providers, the traditional customer-service model has historically focused on cost and risk priorities. These priorities and capabilities will not likely provide adequate support to new broad-based programs around mass-market energy efficiency and conservation. These providers, regulated and deregulated alike, will need new consumer-centric competencies and differentiated energy efficiency and conservation programs to attract and maintain a diverse consumer market.

By drawing on the key findings and insights generated in this survey, we believe there are several key imperatives for utilities/electricity providers to consider as they develop programs to drive sustainable and broad-based increases in consumer adoption of electricity management programs.
Collaborating with communities to increase education

Utilities/electricity providers need to actively promote education programs to eliminate the contradiction between consumer perceptions and their actual knowledge of energy efficiency.

Overall, consumers do not fully equate their personal electricity usage with its environmental impact, and overestimate their own understanding of how to optimize their consumption. Many also confuse different environmental messages, believing that their actions in areas such as recycling and water savings mean they are already “doing their part” for the environment. As a result, consumers generally place electricity conservation as a lower priority.

There is both a pressing need and a major opportunity for utilities/electricity providers to educate consumers on the environmental interconnection between their usage, the impact on the environment and the value of available options and programs. Without a basic understanding of this relationship, many consumers will not engage in a positive manner and, if not carefully managed, their reactions might create a detrimental perception.

Utilities/energy providers need to build increased consumer knowledge by engaging in a multi-tiered awareness program that involves collaboration with stakeholders such as government, environmental groups and an array of local and online communities.

Becoming a trusted advisor

Consumers instinctively want to turn to their utilities/electricity providers for energy-efficiency activities, but providers still need to build trust and credibility.

Today, the typical consumer will only interact with their utilities/electricity providers a few times per year. Most of those interactions are not value-added, but rather focus on resolving an immediate issue. As a result, consumers generally have little engagement with their providers. This low-value interaction is complicated by a low level of trust, especially in competitive markets. When combined with growing concerns about control and data privacy, consumer trust is further undermined.

While consumers say they would turn to their utilities/electricity providers as the first option for energy-saving measures, they also indicate that they have greater trust in the information provided by other sources.

Utilities/electricity providers must enhance their customer relationships and earn sufficient consumer trust before they see broad-based adoption of electricity management programs. To improve the value of the customer relationship and increase levels of trust, utilities/electricity providers should reposition themselves as their consumers’ “trusted advisor” on energy consumption and conservation. They also should seek ways to create a more value-added relationship.

In order to create a trusted advisor relationship, utilities/electricity providers need to be more transparent about their activities and agendas. Providers need to reach and engage consumers through new collaborative partnerships with other influential organizations. Educational and community organizations and consumer advocacy associations are all important new partners in whom customers often have a higher degree of trust. At a macro level, providers need to form strong relationships with government, regulators and union stakeholders who clearly have a role to play in setting the context for lower consumption and pushing the energy-efficiency agenda.

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What is a high-performance business?
Accenture defines high-performance businesses as those that:

- Effectively balance current needs and future opportunities.
- Consistently outperform peers in revenue growth, profitability and total return to shareholders.
- Sustain their superiority across time, business cycles, industry disruptions and changes in leadership.
Creating a consumer-centric organization

Differentiating services and capabilities to better meet a more active consumer base and diverse consumer preferences.

The customer service model used today by most regulated and deregulated providers is largely based on a "one-size-fits-all" approach. For more than 30 years, this model has been methodically tuned to drive standardized service at the lowest possible cost. While this approach has met the broad needs of consumers for decades, the advent of smart technologies and societal shifts toward more active management of energy is causing a fundamental shift in consumer expectations.

Today, more than two-thirds of utilities/electricity providers are pursuing smart metering and/or energy-efficiency demand-response programs that depend on a significant level of customer participation. There is a need for a significant change in the operational mindset to inform, promote and support broad-based consumer adoption.

For providers, this presents several unique challenges. Simply installing smart metering devices and in-home displays will not drive lasting consumer adoption on its own. Utilities/electricity providers must develop a more consumer-oriented organization that addresses the nuances of their consumers' energy-efficiency needs and tailors products and service channels accordingly. This consumer energy support competence should include advanced insight and segmentation, new service channels and advanced products, and integrated education programs. It also must promote a new value proposition that convinces consumers of the impact they can achieve by participating in new electricity management programs.

Conclusion

A new, more active energy consumer is emerging with the potential to fundamentally reshape the relationship between customers and utilities/electricity providers. Those providers that embrace this new energy era with a consumer-oriented mindset stand to prosper far more than those that maintain the status quo.
About Accenture Research

Accenture Research is Accenture's global organization devoted to economic and strategic studies. The staff consists of 150 experts in economics, sociology and survey research from Accenture's principal offices in North America, Europe and Asia/Pacific. This study involved our European experts in survey research.

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.

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