2016 State of the Consumer Report
Executive Summary

The Smart Grid Consumer Collaborative (SGCC) is committed to helping Smart Grid stakeholders develop a deeper understanding about how U.S. consumers think about and engage with grid modernization efforts. In 2015, we updated our groundbreaking Smart Grid Consumer Segmentation Framework and sought to illuminate key changes in consumer attitudes and behaviors since our founding.

The 2016 State of the Consumer Report provides a comprehensive analysis of key themes and data from both SGCC research conducted in 2015 and reports released by the U.S. Department of Energy (DOE) on the experiences of consumer behavior studies funded by the American Recovery and Reinvestment Act. SGCC’s research includes Consumer Pulse and Market Segmentation Study Wave 5 and Consumer Voices 2015. The DOE reports analyzed for this report are Experiences from the Consumer Behavior Studies on Engaging Consumers, and the Interim Report on Customer Acceptance, Retention, and Response to Time-Based Rates from the Consumer Behavior Studies.

SGCC has identified six key themes highlight the current state of the Smart Grid consumer.

Theme 1: Consumers are Seeing the Benefits of the Smart Grid

Because of the significant investment utilities have made in the Smart Grid, consumers appear to be reaping the economic, environmental, and reliability benefits of the technology. Promisingly, these realized benefits align with those that consumers state are important to them.

Theme 2: In Some Important Aspects, the Consumer of Today Differs from the Consumer of Five Years Ago

Over the five waves of Consumer Pulse studies, SGCC has noted some statistically-significant changes in consumer attitudes and behaviors toward the Smart Grid.

(1) Today’s consumers attach a higher importance to Smart Grid’s ability to accommodate increased renewable generation than consumers did five years ago. (2) Consumers are increasingly eager to adopt new technologies. (3) Despite continuing strong consumer favorability towards Smart Grid and smart meters, there has been an increase in unfavorable opinions.
Theme 3: Utilities Need to Show How They are Acting in Consumers’ Best Interests to Increase Trust

In Wave 5 of the Consumer Pulse study, SGCC tested three elements of consumer trust and found that the lowest-ranked factor across all segments was “my utility acts in my best interest.” This drives consumers’ overall trust of their utility down. Fortunately, the DOE studies provide some insight into how utilities can effectively message programs to help consumers see the alignment between utility programs and their best interests.

Theme 4: SGCC’s Segmentation Framework Provides a Clear Continuum of Consumer Engagement Opportunities and Approaches

Among the five SGCC segments identified in the Consumer Pulse and Market Segmentation Study Wave 5, each segment has several areas of untapped interest in Smart Grid-enabled programs and/or products. Additionally, each segment’s unique attitudes and behaviors provide insight into how stakeholders can develop messaging and channel strategies to better engage consumers with these programs and products.

Theme 5: Consumer and Industry Experience Indicate a Path Forward for Smart Grid-Enabled Pricing Programs

One of the biggest potential benefits of Smart Grid is the price transparency enabled by interval meters. Time-based pricing can help reduce reliance on expensive peak generation (which by definition, experience low load factors) by sending a price signal to consumers to consume less. However, there are very few places in the United States where time-based pricing has a strong foothold despite the fact that consumers express strong interest in such programs. SGCC’s research combined with the DOE Consumer Behavior Studies findings provides a strong indication of how to change this by aligning program design with consumer attitudes.

Theme 6: To Date, Nobody has Figured Out the Secret for Engaging Consumers with Usage Data

Although consumers express a desire to get more information about their energy usage from Smart Grid technology, and believe that reducing energy usage helps both the environment and their finances, the utility industry has not yet figured out a way to make granular usage data compelling enough to drive ongoing consumer engagement.