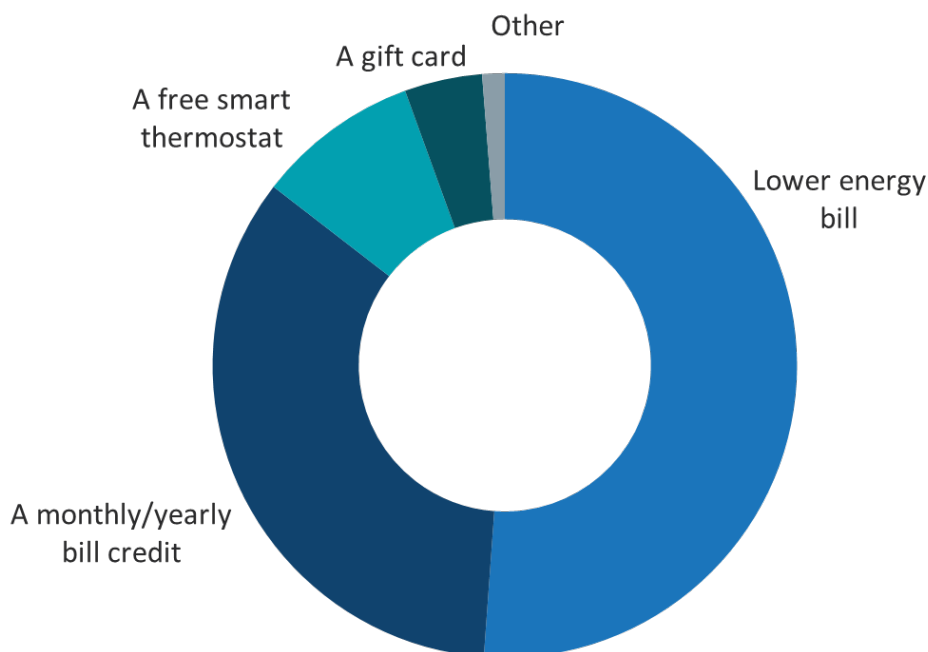


## Incentive to Participate in Demand Response Program



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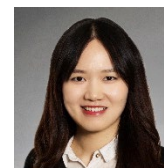
### Consumer Analytics Team



Yilan Jiang, Senior Director of Consumer Analytics



Xiaofan Tan, Consumer Insights Analyst II



Sharon Jiang, Consumer Insights Analyst I

### Industry Analyst



Chris White, Senior Analyst

### SYNOPSIS

Energy providers are actively evaluating the integration of new consumer technologies into their products and services, as they aim to increase energy efficiency, improve service resilience, and manage distributed energy resources. This research examines consumer adoption and perception of utility energy solutions. It also identifies consumer adoption of smart energy devices and interest in energy management use cases.

### ANALYST INSIGHT

“Energy device makers, utilities, home builders, and automakers have an opportunity to make major leaps forward with the tailwind from consumer demand and government funding and investments.”

—Chris White, *Senior Analyst*, Parks Associates



Number of Slides: 101



# Smart Energy at Home: Renewable, Responsive, Resilient

SERVICE:  
SMART ENERGY  
MANAGEMENT

1Q 2022

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### Survey Methodology and Definitions

#### Executive Summary

- Monthly Electricity Bill
- Consumers' Perception Regarding Monthly Electricity Bill
- Attitudes Towards Home Energy Consumption
- Consumer Perception Regarding Renewable Energy Sources
- High Familiarity with Major Home Energy Equipment
- High Intention of Purchasing Major Home Energy Equipment
- High Familiarity with Energy Programs Offered
- Smart Thermostat Segments
- Likelihood of Paying for Energy Monitoring Service

#### Home Energy Consumption Landscape

- Monthly Electricity Bill
- Average Monthly Expenditure
- Monthly Electricity Bill by Region
- Monthly Electricity Bill by State of Residency
- Monthly Electricity Bill by Income
- Monthly Electricity Bill by Family Size
- Consumers' Perception Regarding Monthly Electricity Bill
- Consumers' Perception Regarding Electricity Bill by Actual Bill Paid
- Consumers' Perception Regarding Electricity Bill by Income

- Consumers' Perception Regarding Electricity Bill by Family Size
- Consumers' Perception Regarding Electricity Bill by State of Residency

#### Taking Action to Lower the Bill

- Energy-Saving Actions Taken Over the Past 12 Months
- Energy Saving Actions
- Energy Saving Action Segments
- Energy Saving Action Segments by Income
- Monthly Electricity Bill by Energy Saving Action Segments
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- Consumers' Perception Regarding Electricity Bill by Energy Saving Action Segments

#### Attitudes Toward Energy Consumption

- Attitudes Towards Home Energy Consumption
- Rationale for Energy-Saving Actions
- Rationale for Energy-Saving Actions

#### Households Monitoring Energy Use

- Daily Energy Consumption Breakdown
- Frequency of Tracking Energy Consumption
- Attitudes Towards Energy Consumption Breakdown
- Valuable Tools of Home Energy Consumption Management
- Most Valuable Tools of Energy Management by Adoption Segments
- Most Valuable Tools of Energy Management by Energy Saving Action Segments



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- Willingness to Adjust Home Devices During Peak Periods
- Willingness to Allow Manufacturers/Utility to Adjust Smart Energy Products During Peak Periods
- High Familiarity with Energy Programs Offered
- Energy Programs Used in the Past
- Energy Programs Used Currently
- Interest in Energy Program Enrollment
- Expected Cost-Saving Amount to Participate in Energy Program
- Average Savings Required to Participate in an Energy Program by Income
- Average Savings Required to Participate in an Energy Program by Monthly Bill

## **Energy Program Familiarity and Participant Experiences**

- Top Motivation to Participate in Demand Response Program
- Incentive to Participate in Demand Response Program
- Number of Demand Response Events Experienced During Last 12 Months
- Duration of Demand Response Event
- Demand Response Event Experience
- Reasons for Churning Demand Response Program
- Reasons for not Participating in Demand Response Program
- Interest in Energy Program Enrollment
- Likelihood of Paying for Energy Monitoring Service

## **Smart Thermostat Usage and User Experience**

- Smart Thermostat Ownership

- Smart Thermostat Segments Q4/2021
- Age of Smart Thermostat
- Smart Thermostat vs. Traditional Thermostat Purchase Drivers
- Smart Thermostat Use Frequency
- Reasons for Rarely Interacting with Smart Thermostat
- Features of Current Smart Thermostat
- Typical Used Features of Smart Thermostat
- Smart Thermostat Preferred Control Method
- Important Features of Smart Thermostat Among Owners
- Monthly Energy Saving by Using Smart Thermostat
- Consumer Perception Regarding Energy Saving
- Estimated Monthly Savings by Smart Thermostat Owner/Users
- Average Monthly Cost-Saving Percentage by Consumer Perception
- Smart Thermostat Disposal When Moving Home

## **Potential Smart Thermostat Buyers**

- Households that Don't Currently Own or Intend to Purchase a Smart Thermostat
- Reasons for Not Purchasing a Smart Thermostat
- Motivation for Purchasing a Smart Thermostat
- Important Features of Smart Thermostat Among Intenders
- Preferred Smart Thermostat Control Method Among Intenders
- Factors Increasing Likelihood of Purchasing Smart Thermostat



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## Renewables from Energy Providers

- Consumer Perception Regarding Renewable Energy Sources
- Type of Electricity Provided by the Provider
- Reasons for Not Knowing the Electricity Source

## Major Energy Devices: Landscape

- Ownership of Major Home Energy Equipment
- High Familiarity with Major Home Energy Equipment
- High Intention of Purchasing Major Home Energy Equipment
- Frequency of Using Battery to Power the Home

## Changing Consumer Perspectives on Solar

- Reasons for Not Purchasing Solar Power Products by Income
- Reasons for Not Purchasing Solar Power Products by Area of Residence
- Reasons for Not Purchasing Solar Power Products by Type of Residency
- Purchase Drivers of Solar Panels
- High Likelihood of Purchasing Solar Panels by Monthly Savings

## Major Energy Devices: Intenders to Adopters

- Most Appealing Payment Method for Energy Device Purchase
- Most Appeal Purchase Channel of Energy Device
- Importance of Using Solar Panels with Battery Storage

## Appendix



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## ATTRIBUTES

### **Parks Associates**

5080 Spectrum Drive  
Suite 1000W  
Addison TX 75001

[parksassociates.com](http://parksassociates.com)

[sales@parksassociates.com](mailto:sales@parksassociates.com)

PHONE 972.490.1113

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