2015 NARUC Summer Committee Meeting

Patty Durand, Executive Director
Smart Grid Consumer Collaborative
Consumer Pulse and Market Segmentation Study – Wave 5
I have a fairly complete understanding of what it is, how it would work, and how it would affect homes and businesses.

I have a basic understanding of what it is and how it would work.

I've heard the term, but don't know much about what it means.

I have not heard that term.

Current Level of Knowledge of...

**Smart Grid**
- 7% (Wave 5) 7% (Wave 1)
- 18% (Wave 5) 16% (Wave 1)
- 22% (Wave 5) 24% (Wave 1)
- 51% (Wave 5) 51% (Wave 1)

**Smart Meter**
- 10% (Wave 5) 9% (Wave 1)
- 20% (Wave 5) 18% (Wave 1)
- 22% (Wave 5) 23% (Wave 1)
- 46% (Wave 5) 48% (Wave 1)

n =
- Wave 5 1,004
- Wave 1 1,234
Overall Favorability of the terms “Smart Grid” and “Smart Meter”

**Overall Favorability**

<table>
<thead>
<tr>
<th></th>
<th>Smart Grid</th>
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<th>Smart Meter</th>
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<tr>
<td><strong>Total Favorability (%6–10)</strong></td>
<td></td>
<td>49%</td>
<td>50%</td>
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<tr>
<td><strong>Very Favorable (%9–10)</strong></td>
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<td>17%</td>
<td>16%</td>
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<tr>
<td><strong>Somewhat Favorable (%6–8)</strong></td>
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<td>32%</td>
<td>34%</td>
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<td><strong>Neutral (%5)</strong></td>
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<td>25%</td>
<td>21%</td>
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<tr>
<td><strong>Unfavorable (%0–4)</strong></td>
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<td>18%</td>
<td>24%</td>
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n =
- Wave 5 472
- Wave 1 584
- Wave 5 519
- Wave 1 628
The U.S. Population by Segment

- Green Champions: 30%
- Savings Seekers: 20%
- Status Quo: 18%
- Technology Cautious: 17%
- Movers & Shakers: 15%
“Smart energy technologies fit our environmentally aware, high-tech lifestyles.”
“How can smart energy programs help us save money?”
Status Quo

“We’re okay; you can leave us alone.”
“We want to use energy wisely, but we don’t see how technologies can help.”
Movers and Shakers

“Impress us with smart energy technology and maybe we will start to like the utility more.”
The U.S. Population by Segment

- Green Champions: 30%
- Savings Seekers: 20%
- Status Quo: 18%
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- Movers & Shakers: 15%
# Critical Peak Rebates

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Status Quo (A)</th>
<th>Technology Cautious (B)</th>
<th>Savings Seekers (C)</th>
<th>Movers and Shakers (D)</th>
<th>Green Champions (E)</th>
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<tr>
<td>n=1,004/1,234 W5/W1</td>
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<td>220</td>
<td>206</td>
<td>201</td>
<td>168</td>
<td>209</td>
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</tbody>
</table>

## Likelihood to Participate: Critical Peak Rebates

- **Already Participating**
  - 1%
  - 1%

- **Total Would Participate**
  - 60%
  - 29%
  - 44%
  - 83%
  - 43%
  - 81%

- **Definitely Would**
  - 24%
  - 9%
  - 14%
  - 32%
  - 17%
  - 36%

- **Probably Would**
  - 36%
  - 20%
  - 30%
  - 51%
  - 26%
  - 45%

- **Might or Might Not**
  - 19%
  - 29%
  - 27%
  - 11%
  - 31%
  - 8%

- **Would Not**
  - 20%
  - 42%
  - 29%
  - 5%
  - 26%
  - 10%
### Time-Of-Use Pricing

#### Likelihood to Participate: TOU Pricing

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<tr>
<th>Already Participating</th>
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<th>Movers and Shakers (D)</th>
<th>Green Champions (E)</th>
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<td>Total Would Participate</td>
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<td>Definitely Would</td>
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<td>Would Not</td>
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<td>38%</td>
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n=1,004/1,234 W5/W1
## Demand Response Pricing

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### Likelihood to Participate: Demand Response Pricing

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<tr>
<th>Already Participating</th>
<th>Total Would Participate</th>
<th>Definitely Would</th>
<th>Probably Would</th>
<th>Might or Might Not</th>
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</thead>
<tbody>
<tr>
<td>2%</td>
<td>39%</td>
<td>10%</td>
<td>29%</td>
<td>22%</td>
<td>38%</td>
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</tbody>
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- **Total Would Participate:**
  - 39%
  - Yellow: 21%
  - Orange: 26%
  - Blue: 47%
  - Light Blue: 29%
- **Definitely Would:**
  - 10% (Yellow: 4%)
  - 7% (Orange: 11%)
  - 9% (Light Blue: 9%)
- **Probably Would:**
  - 29% (Yellow: 17%)
  - 19% (Orange: 36%)
  - 20% (Light Blue: 20%)
- **Might or Might Not:**
  - 22% (Yellow: 25%)
  - 28% (Orange: 16%)
  - 24% (Light Blue: 24%)
- **Would Not:**
  - 38% (Yellow: 53%)
  - 44% (Orange: 32%)
  - 46% (Light Blue: 46%)

Green Champions (E) have the highest likelihood to participate at 57%.
### Critical Peak Pricing

**Total** | **Status Quo (A)** | **Technology Cautious (B)** | **Savings Seekers (C)** | **Movers and Shakers (D)** | **Green Champions (E)**
---|---|---|---|---|---
\( n=1,004 \) | 220 | 206 | 201 | 168 | 209

#### Likelihood to Participate: Critical Peak Pricing

- **Already Participating**: 1%
  - Total Would Participate: 24%
  - Definitely Would: 6%
  - Probably Would: 18%
  - Might or Might Not: 23%
  - Would Not: 52%

- **Total Would Participate**
  - Cautious: 19%
  - Seekers: 34%
  - Movers and Shakers: 19%
  - Green Champions: 26%

- **Would Not Participate**
  - Cautious: 57%
  - Seekers: 54%
  - Movers and Shakers: 45%
  - Green Champions: 57%
Technology Adoption and Interest

- **Smart Appliances**: 5% (W5) - 2% (W5) - 53% (W4) - 57% (W4)
- **Electric or Plug-in Hybrid Vehicle**: 3% (W5) - 2% (W5) - 43% (W4) - 39% (W4)
- **Programmable Communicating Thermostat**: 23% (W5) - 22% (W5) - 53% (W4) - 51% (W4)
- **Home Energy Management**: 1% (W5) - 1% (W5) - 60% (W4) - 55% (W4)
- **Photovoltaic System**: 2% (W5) - 2% (W5) - 62% (W4) - 62% (W4)
Top Takeaways

1. Citizens are the priority stakeholder

2. Consumers know very little about the smart grid

3. Consumers tell us they care about energy

4. Consumers tell us they want technology and choice

5. Segmentation helps us understand consumers
Smart Grid Consumer Collaborative

Consumer Engagement for the Smart Grid

PATTY DURAND, Executive Director
Patty.Durand@SmartGridCC.org
@PattyDurandSGCC
678-467-0148