BPA Residential Segmentation

Utility Energy Efficiency Summit

March 18, 2009

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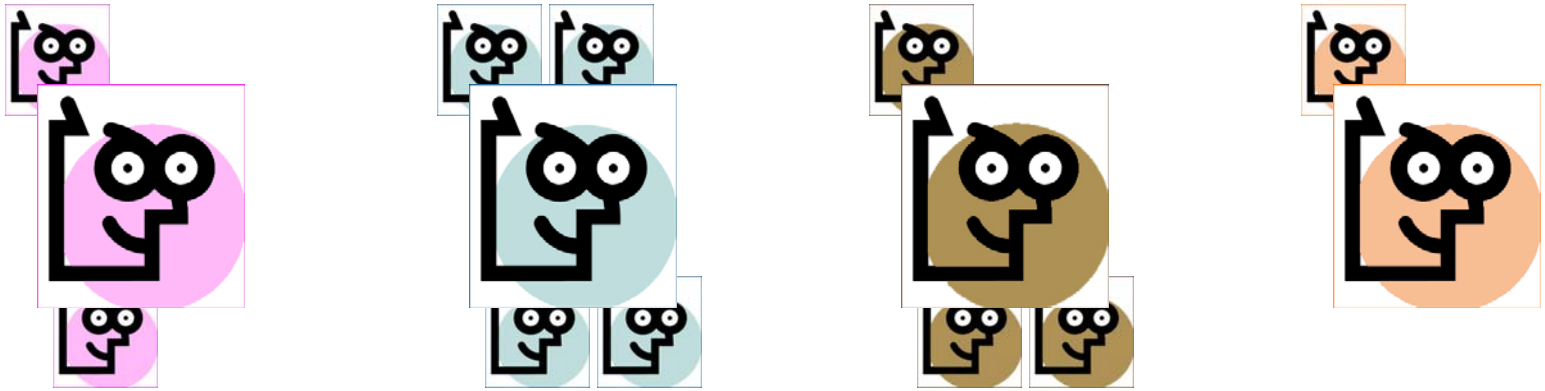
What is Residential Segmentation?

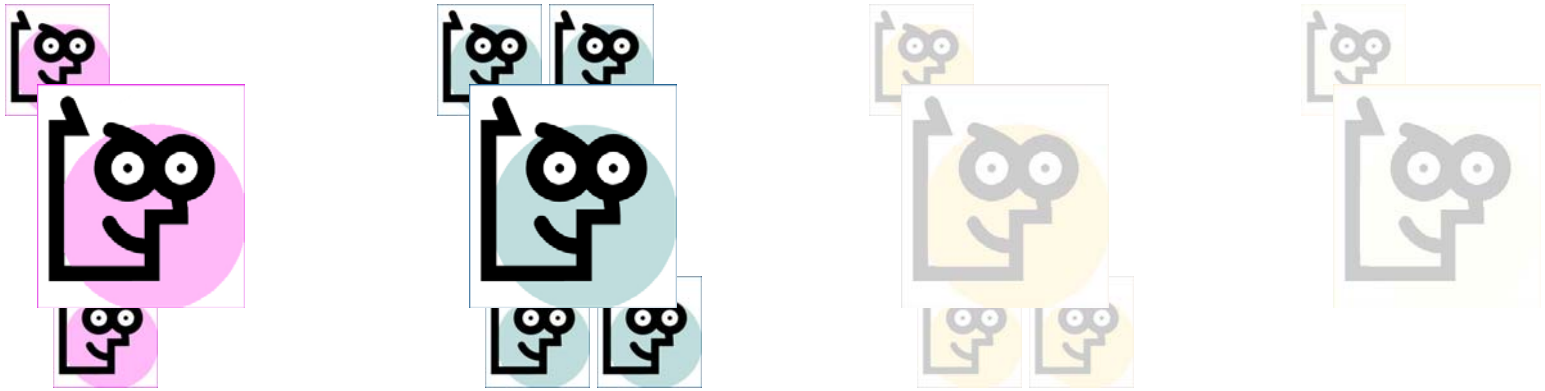
UNCOVER groups of similar customers

With similar attitudes, behaviors and needs

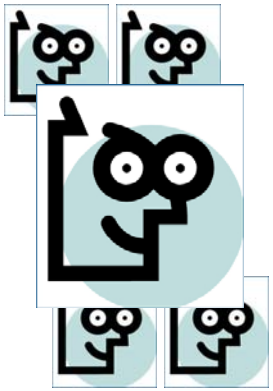
IDENTIFY how many in each group



PRIORITIZE high-value groups



UNDERSTAND their behavior and **RESPOND** with strategies/tactics



Change a Light
Change the world.

What is the BPA Residential Segmentation Research?

Background

- Independent market researcher
- Leveraged methodology used by Puget Sound Energy
- Entire BPA region (excluding Puget Sound area and IOU territories)
- 2000 residential customers
- Regional differences
    1. Western Oregon
    2. Western Washington
    3. Eastern and Central Washington and Oregon (some California)
    4. Idaho, Montana, Wyoming, Nevada and Utah
    5. BPA Region as a whole

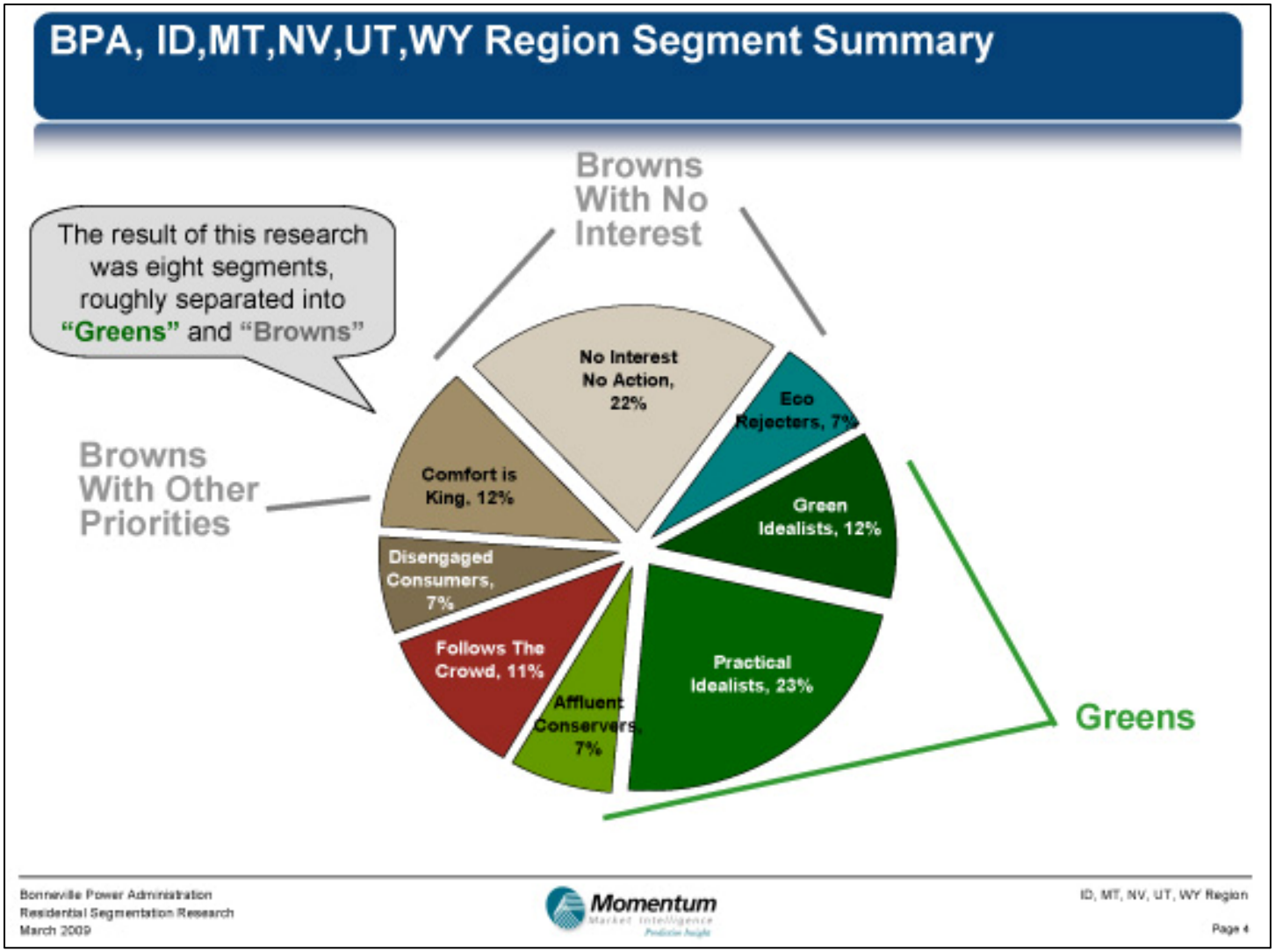
What does it mean to me?

- Provides BPA customer utilities localized information about their residential customers to assist in:
  - Developing new residential energy efficiency programs and services
  - Improving design of existing programs
  - Developing more informed marketing strategies
  - Improving targeting of customer communication
- What does this mean for your utility?
  - Insight into how to best market energy efficiency to your individual retail utility customers
  - Opportunity to benefit from BPA marketing efforts
  - Opportunity to share in marketing efforts with other utilities in your region.
- What does it mean for Energy Efficiency? → Greater participation by retail utility customers, resulting in greater energy savings

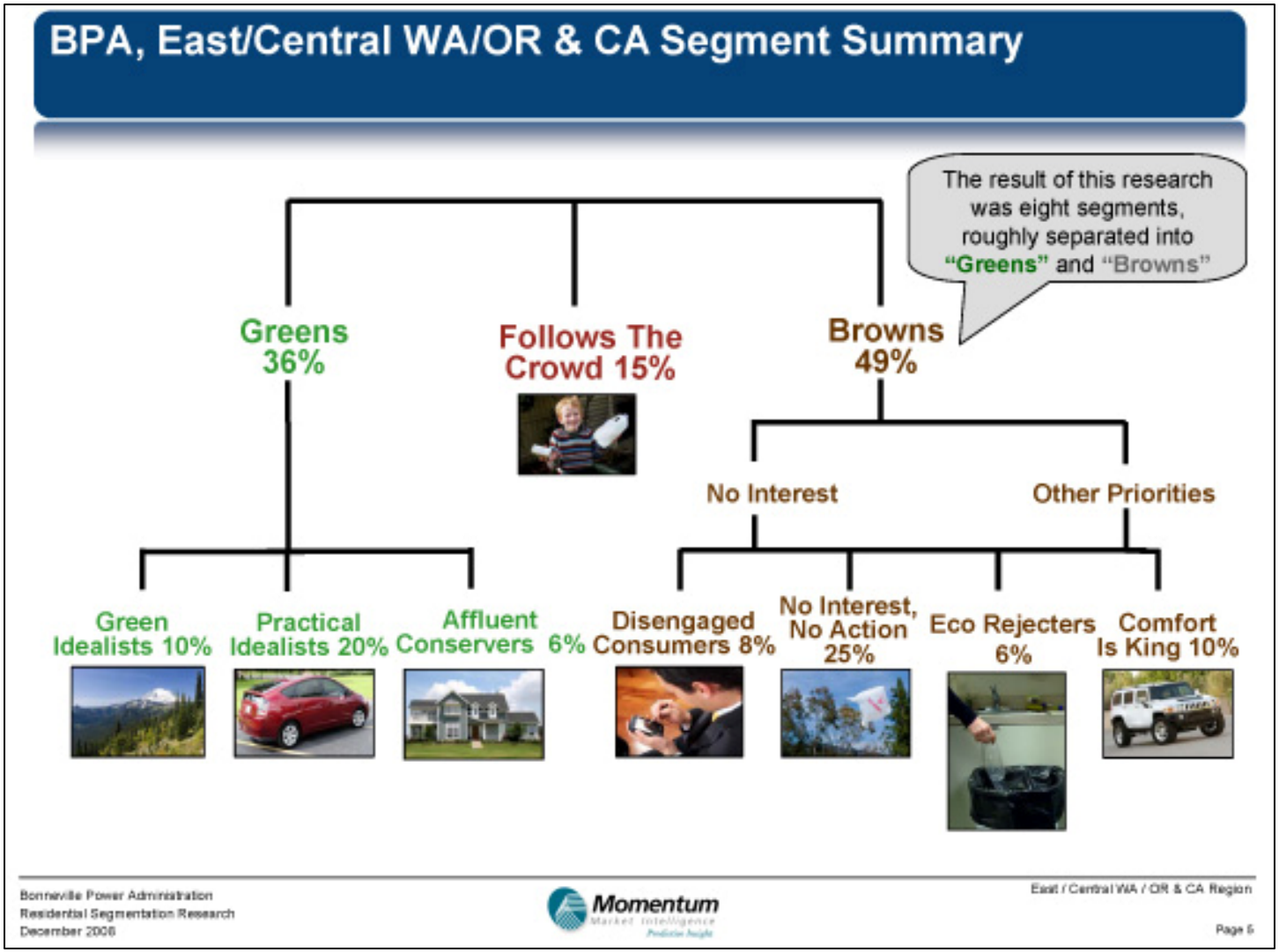
What's included for each region:

1. **Overview report**
   - Research background
   - High-level information about each segment specific to your region
   - How to use to information to prioritize segments, develop programs for and message to each segment
2. **Segment personalizations**
   - Demographics, personas and psychographics for each segment
   - Segment implications: marketing efforts, potential load impact, receptivity to conservation effort
3. **Detailed findings**
   - More in-depth demographics and psychographics including actions and attitudes about energy efficiency, utility, purchase decisions

Overview report



Overview report



Overview report

Customer Segments – The Greens

- Green Idealists, 12%
  - Most concerned with conserving, controlling energy use and costs, the environment and the environmental impact of energy use
  - Very aware of connection between conservation activities & their role in protecting the environment
  - "Green" utility is very important; most positive opinions of their local utility; willing to accept higher costs for utility's green activities
  - Conservation activities are higher overall than any other segment, though similar to the other "Green" segments; most likely to notice any savings realized from energy efficiency actions taken
  - Express most interest in "new programs" tested in the survey
  - Majority are women; one of segments with lowest income; smaller homes than most; 2nd largest proportion of renters; low natural gas penetration compared to most other segments

- Practical Idealists, 23%
  - Very concerned with conserving, controlling energy use and costs, the environment and the environmental impact of energy use (slightly less so than Green Idealists)
  - Very aware of connection between conservation activities and their role in protecting the environment – but, slightly less so than Green Idealists
  - Level of conservation activities very similar to the Green Idealists, though levels of participation in rebate programs *slightly below* Green Idealists
  - "Green" utility is very important (though slightly less so than for Green Idealists); impressions of their local utility slightly less positive than Green Idealists, though still in the satisfactory range
  - Interest in new programs strong, but lower than for Green Idealists
  - Significantly larger proportion of home owners (100%) than the Green Idealists; homes are larger than most segments

More detail on demographics, segment messaging and perceptions can be found in the "ID, MT, NV, UT, WY Personalizations". Even greater detail can be found in the "Detailed Findings Report".

Overview report

Segment Prioritization is the First Step in Implementation
ID,MT,NV,UT,WY Region

	Green Idealists	Practical Idealists	Affluent Conservers	Follows the Crowd	Disengaged Consumers	Comfort is King	No Interest, No Action	Eco Rejecters
Share of ID, MT, NV, UT, WY Customers	12%	23%	7%	11%	7%	12%	22%	7%
Electricity use / potential use/ size of home	◔	◕	◑	◔	◑	●	○	◔
Attitudes Predisposed to EE/ Conservation/ Degree of "Green"	●	◕	◑	◑	◔	○	◔	○
Overall EE/Conservation Participation	●	◕	◕	◑	◑	◑	◔	◔
Interest in New EE Programs	●	◕	◔	◑	◔	◔	◔	○
Awareness of/ Participation in Rebate Programs	●	◑	◑	◑	◕	◕	◑	◑
CFL Purchase and Use / Installed	●	●	●	◑	◑	◑	◔	◔
Other EE Activities	●	●	◕	◑	◑	◑	◔	○

High		Medium		Low
●	◕	◑	◔	○

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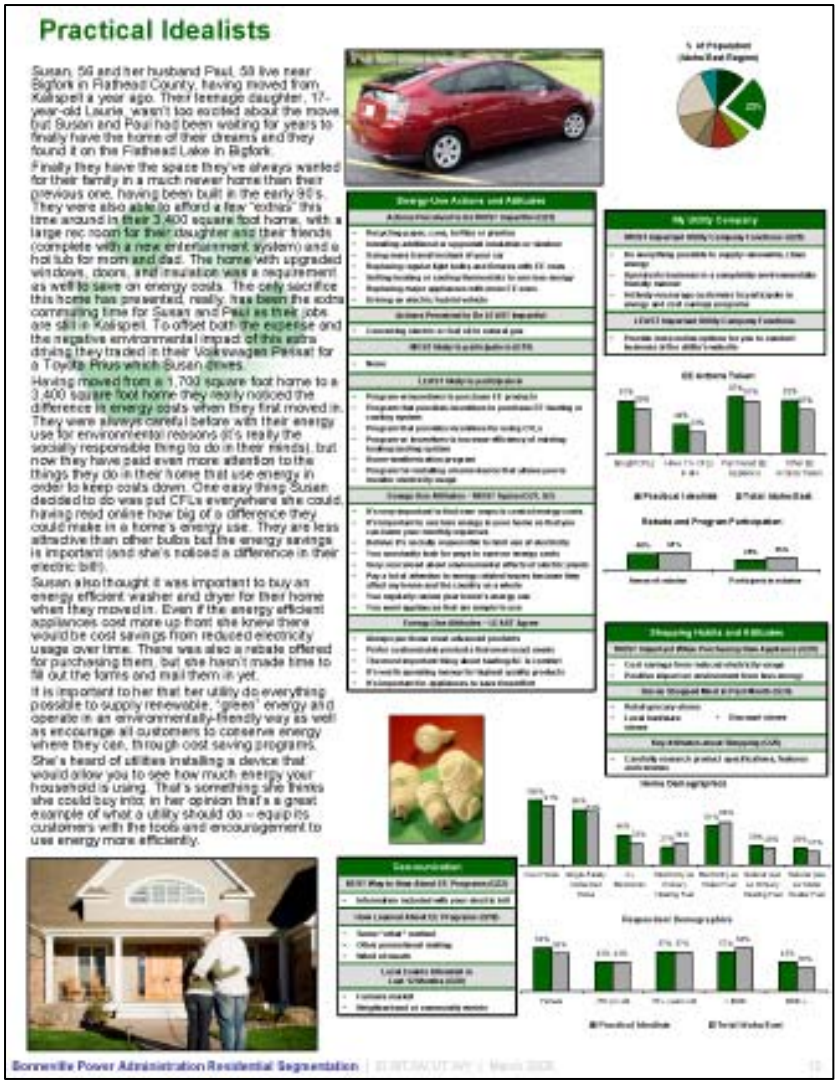
Market Intelligence
Predictive Insight

ID, MT, NV, UT, WY Region

Page 12

Personalization report



Practical Idealists

Susan, 56 and her husband Paul, 58 live near Bigfork in Flathead County, having moved from Kalispell a year ago. Their teenage daughter, 17-year-old Laurie, wasn't too excited about the move but Susan and Paul had been waiting for years to finally have the home of their dreams and they found it on the Flathead Lake in Bigfork.

Finally they have the space they've always wanted for their family in a much newer home than their previous one, having been built in the early 90's. They were also able to afford a few "extras" this time around in their 3,400 square foot home, with a large rec room for their daughter and their friends (complete with a new entertainment system) and a hot tub for mom and dad. The home with upgraded windows, doors, and insulation was a requirement as well to save on energy costs. The only sacrifice this home has presented, really, has been the extra commuting time for Susan and Paul as their jobs are still in Kalispell. To offset both the expense and the negative environmental impact of this extra driving they traded in their Volkswagen Passat for a Toyota Prius which Susan drives.

Having moved from a 1,700 square foot home to a 3,400 square foot home they really noticed the difference in energy costs when they first moved in. They were always careful before with their energy use for environmental reasons (it's really the socially responsible thing to do in their minds), but now they have paid even more attention to the things they do in their home that use energy in order to keep costs down. One easy thing Susan decided to do was put CFLs everywhere she could, having read online how big of a difference they could make in a home's energy use. They are less attractive than other bulbs but the energy savings is important (and she's noticed a difference in their electric bill).

Susan also thought it was important to buy an energy efficient washer and dryer for their home when they moved in. Even if the energy efficient appliances cost more up front she knew there would be cost savings from reduced electricity usage over time. There was also a rebate offered for purchasing them, but she hasn't made time to fill out the forms and mail them in yet.

It is important to her that her utility do everything possible to supply renewable, "green" energy and operate in an environmentally-friendly way as well as encourage all customers to conserve energy where they can, through cost saving programs.

She's heard of utilities installing a device that would allow you to see how much energy your household is using. That's something she thinks she could buy into; in her opinion that's a great example of what a utility should do – equip its customers with the tools and encouragement to use energy more efficiently.

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Personalization report

Segment Implications – Practical Idealists

Marketing Effort

- One of the easiest segments to market to, second only to the Green Idealists, Practical Idealists would be receptive to a variety of messages from the importance and social responsibility of energy conservation to cost savings.

Potential Load Impact

- Houses in this segment are larger than most, with more all-electric homes, and perceptions of energy bills are higher than many segments. Furthermore, this is the largest segment in the region, all of which suggests more potential conservation behaviors or end uses that could be impacted.

Penetration

- There's a good deal of interest in home weatherization programs, and programs that install a device for monitoring electricity use, and potential for participation

Going Forward

- This segment's history of engaging in energy efficiency behaviors suggest they will be likely to continue doing so in the future, making them a lucrative segment in terms of energy savings.
- As with the Green Idealists, marketing to the female head of the household may be most effective since again it appears they have sole responsibility for many energy related decisions.

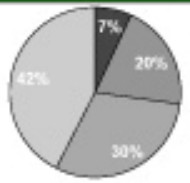
Detailed findings

Practical Idealists
EE Activities

80% (71%) bought CFLs

82% (79%) bought EE appliance of those who purchased any large appliances in the past 12 months

of CFLs in HH



56% (53%) are aware that electric utility offers appliance rebates.

26% (27%) of HH's aware of electric utility appliances *also* participate in them.

Rebate Submission Preference	
Online	39% (35%)
Postal mail	35% (39%)
Phone (1-800 number)	25% (25%)

Rebate Receiving Preference	
Get credit on electric bill	62% (58%)
Receive check by postal mail	34% (38%)
Electronic voucher for use on online purchases	4% (4%)

55% (44%) noticed savings from EE actions taken

76% (68%) Do Other EE Activities (other than Rebate Programs & CFLs)

Replacement Responsibility (Among Renters)

	You	Landlord/ Property Owner
Bulbs in Home	73% (59%)	27% (41%)
Fixtures in Home	11% (6%)	89% (94%)
Air Conditioner	0% (8%)	100% (92%)
Water Heater	17% (28%)	83% (72%)

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Residential Segmentation Research
March 2009

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Percentages shown in parentheses represent the total non-Puget Sound Energy customer base.
Non-parenthetical percentages represent the current segment.

Page 30

Detailed findings

Practical Idealists
Purchase Habits - Appliances

Attitudes Related to Energy-Using Appliances (Q21)	
(9-10% Top Box "Strongly Agree")	
Comfort / Innovation	
It's very important that appliances save you time and effort	37% (35%)
The most important thing about a heating or AC system is comfort	36% (36%)
Prefer customizable products that can meet exact needs	29% (28%)
Always purchase the most advanced products and technologies to ensure they do not become obsolete too soon	21% (17%)
Simplicity	
Without exception, want appliances that are simple to use	53% (48%)
Cost vs. Quality and the EE Trade-off	
It's important to use less energy in your home so that you can lower your monthly expenses	71% (58%)
It's worth spending more for an EE electric appliance or device	57% (38%)
It's worth spending more to get the highest quality available	34% (26%)

Most Important Factors When Buying a New Appliance (9-10% Top Box "Very Important")	
Cost savings from reduced electricity usage	69% (49%)
Positive impact on environment from less energy	62% (39%)
Purchase price for buying appliance	48% (45%)
Discounts for buying an EE appliance	49% (40%)

Cost Savings vs. Environment Benefits

55% (66%) 44% (34%)

Percentages shown in parentheses represent BPA (non-Puget Sound area) customer base.
Non-parenthetical percentages represent the current segment.

Detailed findings

Practical Idealists
Conservation: Is It Worth It?

Actions Perceived to be Major Contributors to Protecting Environment (Q23)	
(9-10% Top Box "Makes a Major Contribution")	
Recycling paper, cans, bottles and plastics	80% (60%)
Installing additional or upgraded insulation or windows	69% (49%)
Setting heating and cooling thermostats to use less energy	66% (46%)
Using mass transit instead of driving	63% (39%)
Replacing regular light bulbs and fixtures with EE ones	62% (41%)
Replacing major appliances with more energy-efficient ones	57% (37%)
Driving an electric/hybrid gas-electric vehicle	55% (36%)
Converting electric or fuel oil heating to natural gas	21% (18%)

Opinions of Own Utility - "How important is it that your utility is … ?" (Q31)	
(9-10% Top Box "Strongly Agree")	
…a company well prepared for emergencies, like storms and natural disasters	61% (52%)
…a company that actively encourages customers to use energy more efficiently	54% (43%)
…a company that understands and cares about the needs of the local community	55% (45%)
…a company that offers its customers fair and reasonable rates	53% (43%)
…an environmentally responsible company	49% (37%)
…a credible information source for the community on EE/green power programs	47% (36%)
…a company that makes it easy to get information about its EE programs/services	46% (37%)
…a company that actively promotes programs to help customers save money	43% (35%)

2% (20%)
did **NOT** perceive any actions as making a **MAJOR CONTRIBUTION** toward protecting the environment.

Important for utility to do X – even if it costs more	
Be Green	
Operate business in a completely environmentally-friendly way	62% (40%)
Do everything possible to supply clean, renewable energy	79% (50%)
Encourage Conservation	
Actively encourage customers to participate in energy and cost-saving programs	67% (40%)
Have Online Options	
Provide more online options for customers on the utility's website	20% (15%)

Percentages shown in parentheses represent BPA (non-Puget Sound area) customer base.
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Residential Segmentation Research
March 2009

Momentum Market Intelligence

Page 32

Detailed findings

Practical Idealists

There are small differences in the segment profiles across sub-regions

Western Oregon Region

- Practical Idealists in this region differ from all Practical Idealists in their percentage living in an urban area and their lower AC usage. More also have a post-four-year college education and are more aware of their utility's appliance rebates, but few have received a CFL rebate (if aware and participating).

Respondent/Home Demographics
64% (31%) Urban dwelling
26% (41%) Use AC at home
31% (20%) Have a post-four-year college education

Energy Efficiency Attitudes/Communications/Local Events Attended
71% (56%) Aware utility offers appliance rebates
7% (21%) Received a rebate for CFL's (if aware and participating)
74% (62%) – (9-10) 'Strongly Agree' it's important for their utility to operate in an environmentally-friendly way
47% (33%) Have attended a home and garden or sportsman's show in the last 12 months

Western Washington Region

- Practical Idealists in this region differ slightly from all Practical Idealists in their percentage living in an urban area.

Home Demographics
43% (31%) Urban dwelling

Idaho and Eastern Region

- Practical Idealists in this region differ from the total population of Practical Idealists in their percentage living in a rural area and their lower home electricity usage.

Home Demographics
100% (69%) Rural dwelling
27% (52%) Use electricity as their primary home heating fuel
61% (77%) Use electricity as their primary water heater fuel
29% (41%) Use AC at home

Energy Efficiency Attitudes / Local Events Attended
47% (60%) – (9-10) 'Strongly Agree' the long term threat of global warming and climate change is real and potentially catastrophic
69% (80%) – (Top Box 9-10) Think that recycling paper, cans, bottles and plastics makes a major contribution toward the environment
54% (44%) Attended a rodeo or county fair in the last 12 months

East/Central WA, East OR and CA Region

- Practical Idealists in this region differ from the total population of Practical Idealists in their percentage living in a rural area and their higher AC usage.

Home Demographics
99% (69%) Rural dwelling
64% (41%) Use AC in their home

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Residential Segmentation Research
March 2009

Momentum Market Intelligence

Page 36

So, what does it all mean?

Using the Segmentation Data

- Identify what your utility believes to be the best targets for energy efficiency program marketing (taking into consideration a number of possible variables, such as size, the potential load they represent, likely receptivity to energy efficiency, etc.).
  - *This is an important step as organizations often do not have the bandwidth to pursue all possible segments at once and there may in fact be segments deemed not worth the effort or money to try to reach.*
- Determine to what degree the most desirable customer segments can be uniquely targeted vs. a more general approach (targeting all the "Greens" but not the "Browns").
  - *Again, some organizations will simply not have the bandwidth to approach each segment uniquely, necessitating they group some similar segments.*
- Begin to understand the types of messages / positioning and channels that will work best to reach these customers. Some of these have been identified in the regional Personalizations Report.
- Determine what, if any, energy conservation programs could be modified or created to make them more attractive to the best energy efficiency target customers.

How to get the study

www.bpa.gov/go/resseg