



# **Relovilles and Retrofits: Big Homes and Energy Conscious Homeowners in Alpharetta, Georgia**

**Susan Mazur-Stommen, ACEEE  
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# Deep South Project

## Description

- What we hoped to find
  - How we set about looking
  - What choices were made
  - Who was involved
  - Who did we look at
  - Where did we go



# Goals of Research

- To show that the lack of EE programs and policy in the South is *not* due to consumer indifference
- To debunk common memes about the South and energy consumption
  - Energy in the South is cheap
  - People are opposed to EE for ideological reasons
  - Climate makes it hard for people to change (A/C)
- To explore the ways in which people are implementing EE solutions in their homes and businesses.

# Goals of Research (cont)

- To look for common patterns of behavior across a variety of settings (rural to urban), social strata, and sectors
- To let the voices of energy consumers be heard in context
- To collect data and provide analysis that will be helpful to policy-makers and program designers.

# Alpharetta: Big Homes, Big Savings

Higher income, larger footprint suburban home-owners

Houses are variants on traditional styles but distinct in their clusters of:

- lot size
- square footage
- architectural detail
- access to amenities



# Questions/Assumptions

**Investment** – a key question for us was, could we identify a way to make investing in energy efficient products and behaviors more palatable to a likely resistant audience?

**Barriers** – How do we promote energy audits and retrofits to upper income homeowners, who may not find small savings or long-term payback scenarios particularly compelling?

**Workarounds** – We expected to use ‘framing’ language, such as ‘optimization’ or ‘maximization’ to mitigate resistance to the term, ‘conservation’.

# Household activities and decision-making

When it comes to house operations and maintenance, 60% of our participants said they were the ones who pay the bills and take care of the house

We were interested in capturing this information because it could be helpful to shape thinking regarding home energy retrofits, selecting as the proper target the person in the household who actually cares for home systems.

# Smart homes and appliances

The concept of 'smart' and 'energy energy-efficient' was intertwined  
When asked about appliances, they mentioned energy efficiency.

If asked about 'smart' appliances, they mentioned energy efficiency.

Leanne told us that, "energy efficient washers need special detergents, use less water."

Ella said, "[like a] smart TV? It has the internet. There are TVs that use less power."



# Familiarity

High awareness of, and participation in,  
home energy *audits*

Four of five households had at least one  
audit

- Ella told us, “I need to have one done here on this house. I know I could save energy.”

NO awareness of term Home energy  
retrofit.

# Low Resistance to ‘conservation’

High awareness of, and a positive attitude towards, the term ‘conservation’

Surprising, given that other research has shown more resistance to the use of the term.



Leanne says, “I am all for conserving energy, I don't believe in being wasteful. I save water, for instance. I want to save money on my bills. I think most people want to save money and conserve.”

Her husband bought a temperature gun and tested his HVAC himself.



Fieldnotes, July 25, 2012

## High Resistance to TOU pricing

No matter what you call them, 'dynamic pricing, flex pricing, time of use pricing' are seen as punitive by upper income owners

People feel that already do a lot, "I mostly run my dishwasher at night," said Elizabeth, "so the one time I have company over and want to run it in the daytime I have to pay more?"

People are willing to pay more for the flexibility and freedom

They asserted that they would refuse to participate.

“Among Elizabeth’s other activities is placing buckets in showers to catch water for her garden, and she exhorts guests to put on sweaters when they complain that her house is too cold.

She is deeply Christian, and deeply ‘green’ in the sense that waste of all kinds bothers her, and that she believes that having been given so much, it is a blessing to her to be able to pass on the favor through the bounty of her garden and the volunteering of her time for church and local schools.”

Fieldnotes, July 11, 2012



# Findings

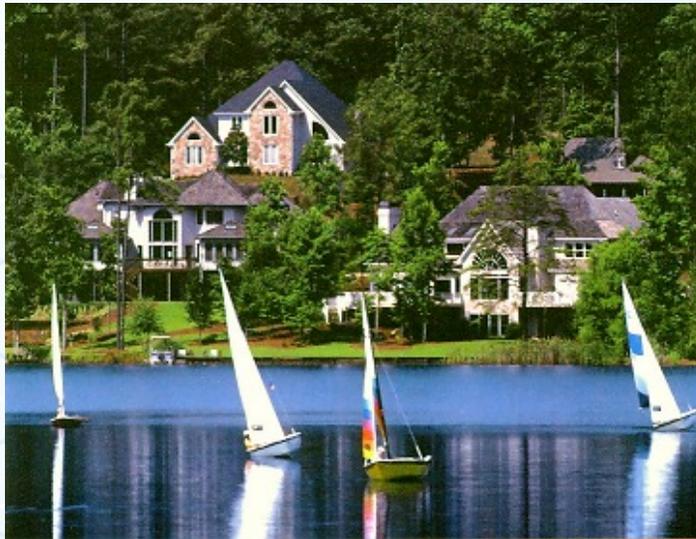
Interest – we found an interest in savings, but also an interest in doing energy efficiency because it is the right thing to do. Christian ethos.

Participation – people read their bills, and take advantage of home energy audits. There is an awareness of the need for HVAC maintenance.



“Donna has reservations about the providers assigned to conduct audits. They were scam-artists, in her opinion, trying to sell her things:

“All they wanted to do was give me a list of things to buy and for them to do to my house, ‘Well, you need a box on the outside, and this widget isn't connected to the flange, and da da da da da.’.”



Fieldnotes, July 13, 2012

# Recommendations: Empowering and Rewarding Energy Efficiency

Our informants want to save, and invest in EE, but they distrust government or policy intervention

Unfortunately, there is also not much trust placed in market-based solutions.

For that reason **we are emphasizing engagement with faith-based organizations** and other ‘value-based’ voluntary associations.

We see a resistance to dynamic pricing as currently envisioned.

For that reason **we recommend alternatives that provide a *reward* for energy use reduction** (compared to a baseline) during a critical peak period. If no conservation action is taken, the customer is billed as they normally would be.