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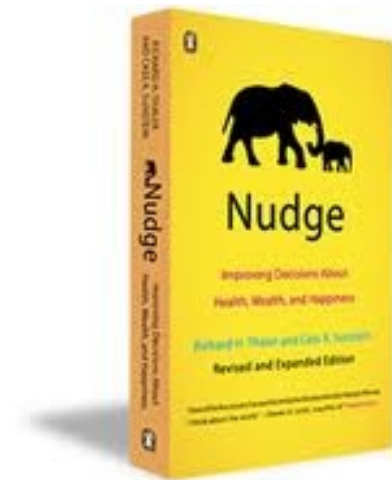
Refining the Nudge

Presentation for Behavior Energy and Climate Change
Conference 2012

Cheryl Winch
The Cadmus Group
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Overview

- Nudge & behavior decision-making
- Choice architecture
- Role of survey research
- DSM nudge applications



Why are People Irrational?

- Why do they not act in their best interests?
- Why is energy behavior change so difficult when the reward is intrinsic to the actions?
- How is market research involved in choice architecture?
- When is self-report most unreliable?
- How to use nudges in marketing, program design, and evaluation?

Choice Architecture Premise

- Can't afford to make consciously reasoned decisions for every choice
- Some decisions matter more than others
- More options not always better
- Decision making does not occur in a vacuum



Choice Architecture

Choice architecture is about creating or affecting the environment in which people make decisions



Role of Choice Architects

“Choice architects have the responsibility for [creating or] organizing the context in which people make decisions.”

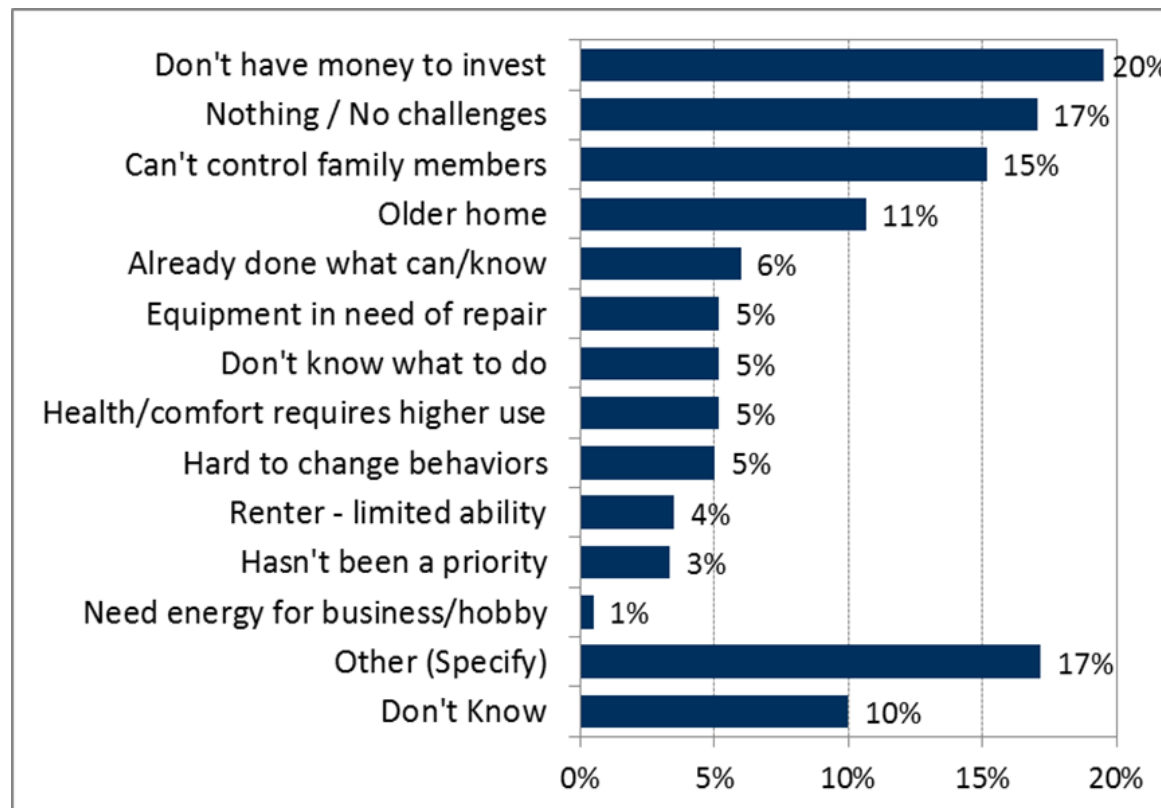
Market researchers have a responsibility for understanding the context in which people make decisions

Research Architecture

- Survey format
 - Phone versus online/paper
 - Qualitative methods
- Energy use decision context
 - Surveys bring decision making to conscious level
 - Individual versus household
- Survey response options
- What is an energy-saving action?
- Who is the expert?

Energy Use Decision Context

What challenges, if any, do you face in saving energy in your home?



Multiple responses accepted; percentages are of respondents

Household Context

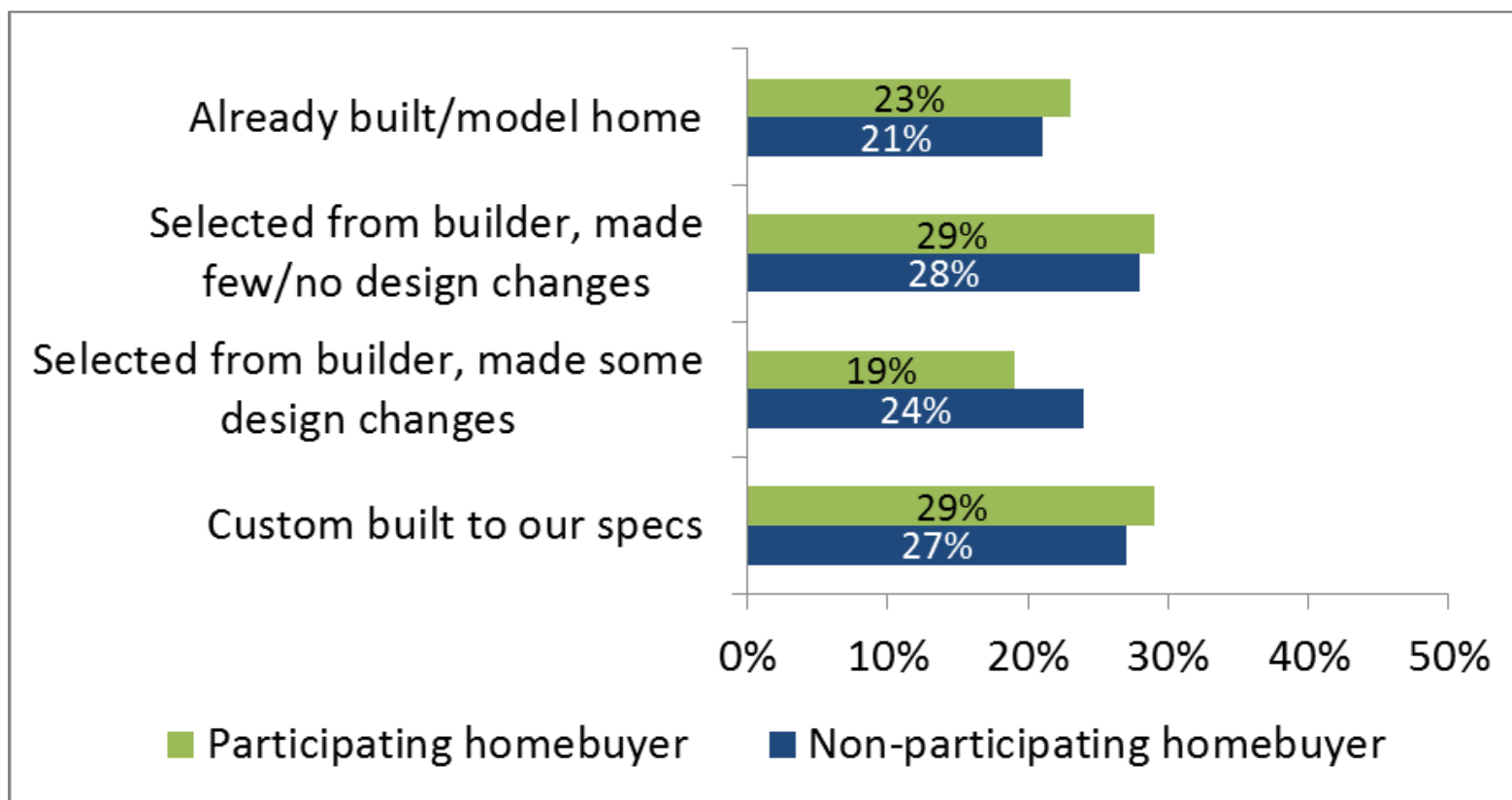
What have you done to save energy in your home?

- *"Changed our lights, high efficiency washer and dryer, we got rid of kids."*
- *"I love my husband, but he is wasteful in everything he does. There's nothing I can do about him."*

What challenges, if any, do you face in saving energy in your home?

"Crappy government. They keep taking our benefits."

Decision Role in New Home Purchase

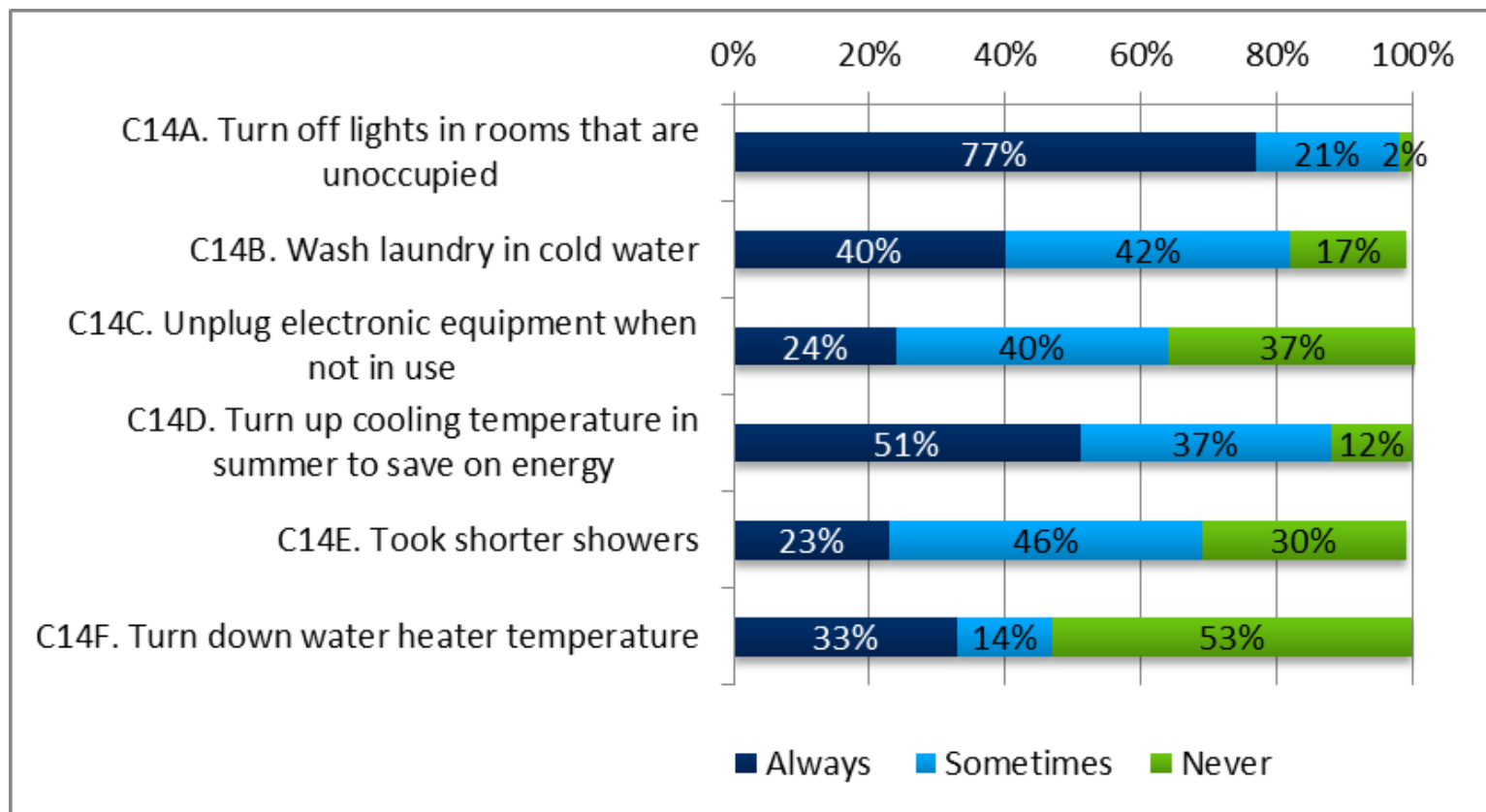


What is an Energy-saving Action?

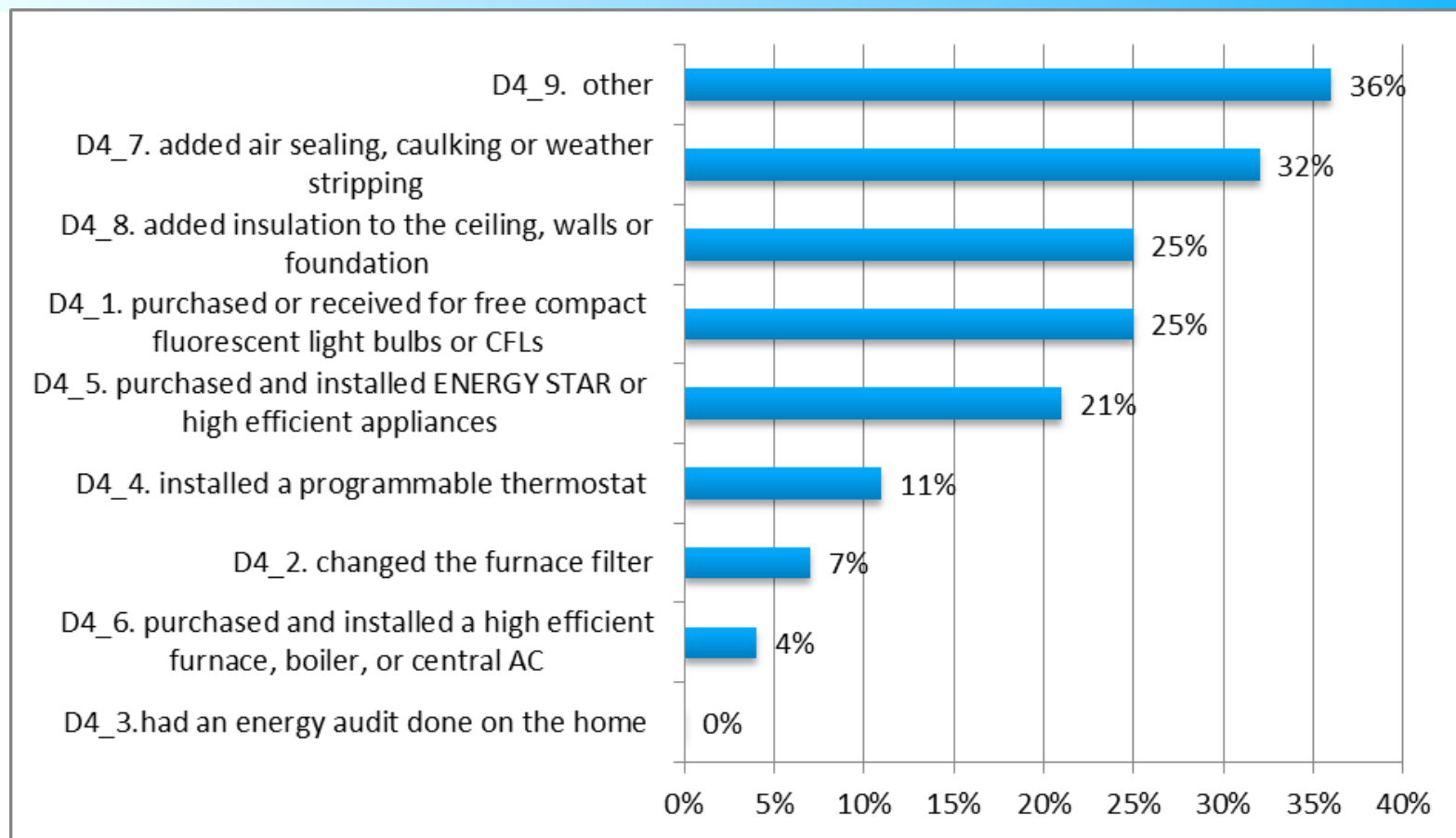
- Usage awareness before use modification
- Behavior versus purchases, investments
- Frequency and persistence



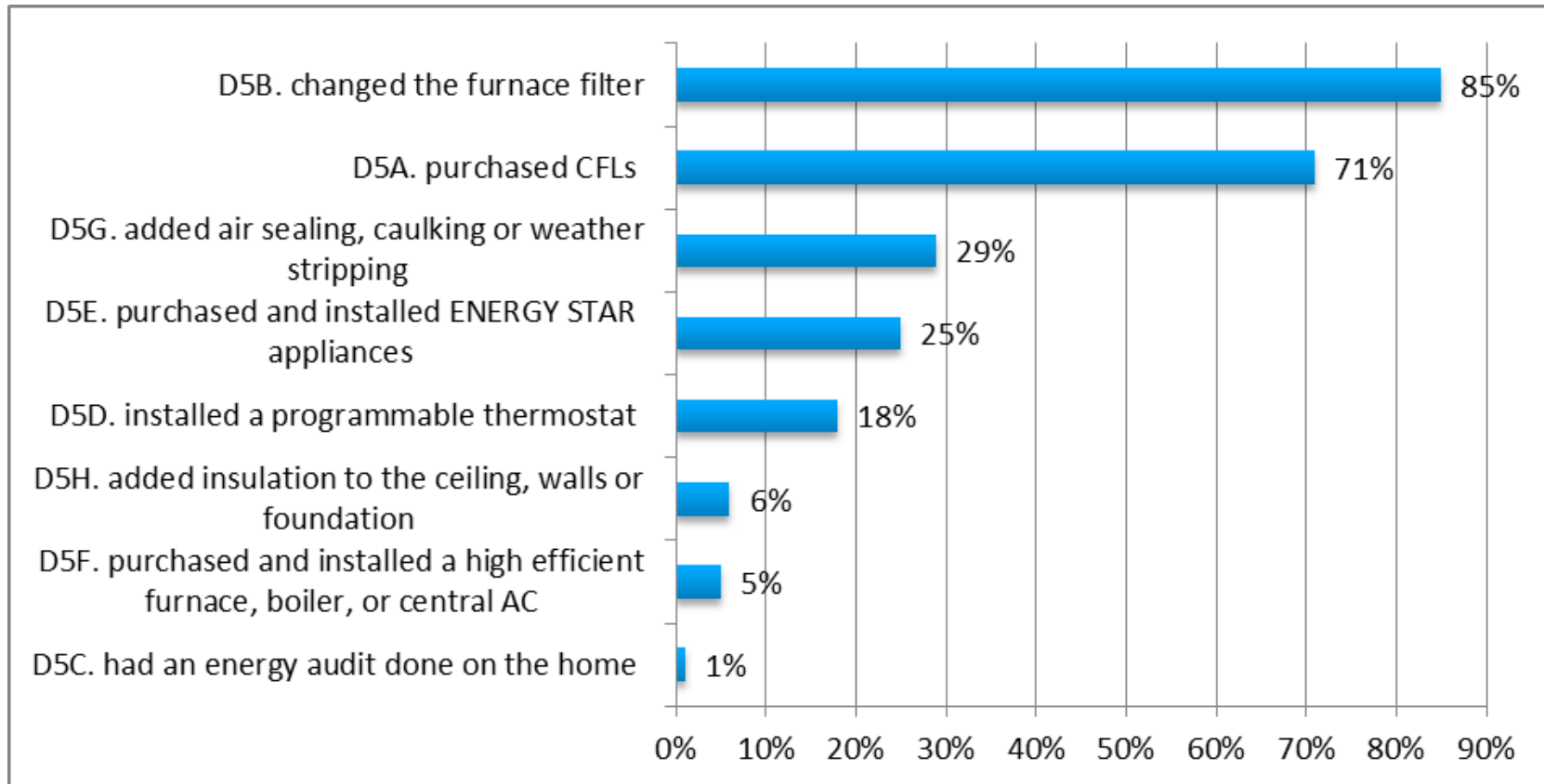
Prompted Energy Saving Behaviors



Unprompted Energy-saving Home Improvements



Prompted Energy Saving Actions



Response Options

- Scaling and neutral options
- Multiple choice versus fill in the blank
- Long lists
- Classifying responses



Who is the Expert?

- Role of market actors
 - Asking customers about how they selected an efficient AC model
 - Asking contractors/retailers to describe customer motivations, barriers, decision reasons



Cautions

- Attributing influence to decisions
- Social desirability bias
- Inflated sense of energy efficiency knowledge
- Homes are already efficient
- Have already done everything

Nudge Strategies

- Defaults
- Expecting Error
- Mappings
- Feedback
- Structuring complex choices
- Incentives

Defaults

- Energy-efficiency features in new homes
- Thermostat settings



Expect Error

- Motion sensors/controls on lighting
- Alerts (other than the bill) for high/atypical usage



Mapping

- Watts to lumens conversion
- Analogies


A FURNACE WITH A DIRTY FILTER IS LIKE AN ATHLETE TRYING TO BREATHE THROUGH A BELGIAN WAFFLE.

How to Buy a Light Bulb

Lumens: The new way of looking at light.

1

You used to buy these.




INCANDESCENT

WATTS
100W
75W
60W
40W

2

You want this much light.




LUMENS


1600
1100
800
450

3


Now you can buy these.



LED
Most Efficient



CFL
More Efficient



HALOGEN

WATTS		
coming soon	up to 23W	up to 72W
coming soon	up to 20W	up to 53W
up to 12W	up to 13W	up to 43W
up to 9W	up to 9W	up to 29W

Lumen outputs and wattages are based on the most common products available for each medium screw base light bulb. Actual lumen output and wattage may vary by product. Revised April 20, 2012

MORE LUMENS = MORE LIGHT

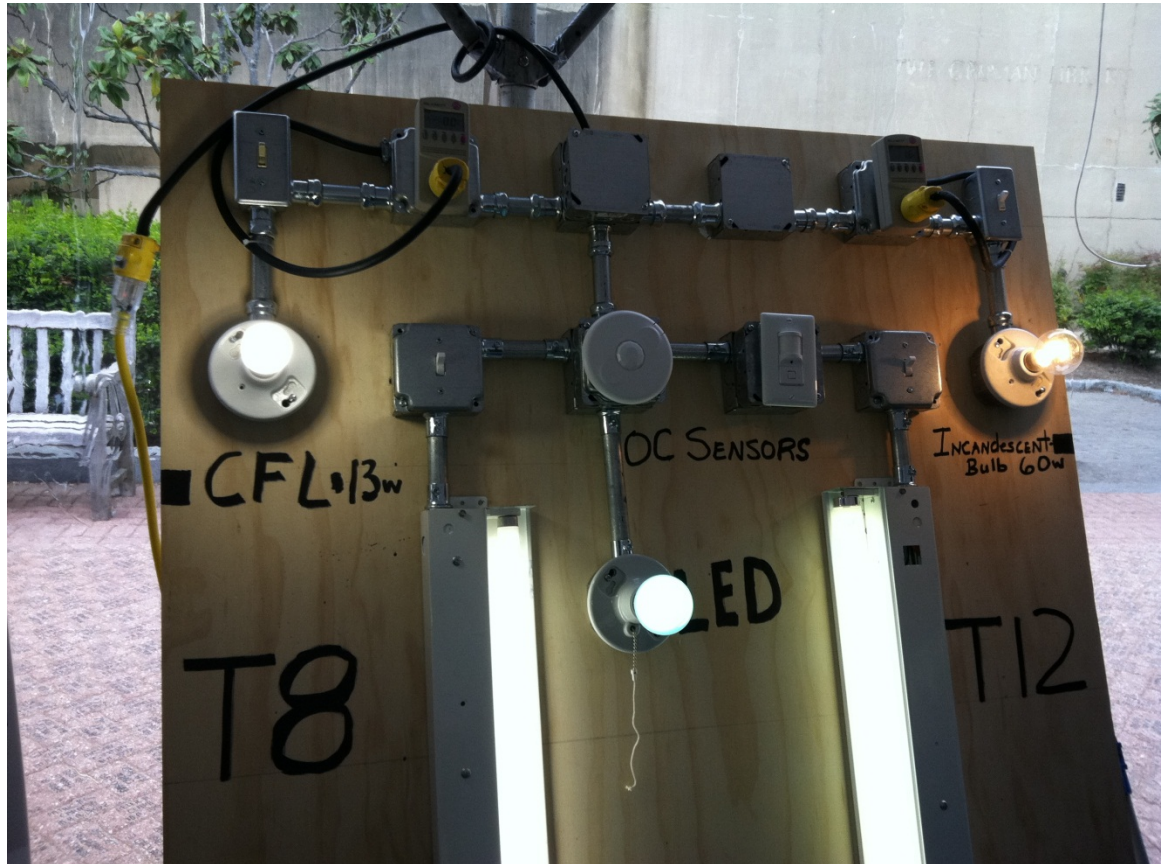
Feedback

- Home energy monitors
- Home energy reports



Structuring Complex Choices

- Light board
- Energy Audit reports



Incentives

- Rebates for energy-efficient equipment
- Rate structures
- Non-energy benefits
 - Increased comfort
 - Reducing waste
 - Doing one's part

Upshot

- Do the research
- Clarify research objectives, methods, audience
- Understand the broader context
 - How energy use decisions are made
 - How context affects responses
- Ask good questions
- Apply insights in small ways