



**DENVER**  
THE MILE HIGH CITY

# Harnessing Social Science to Increase Impact: Community-based Social Marketing for Utilities

7th Annual Rocky Mountain Utility Efficiency Exchange  
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October 9, 2013



# Information-Intensive

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- ↳ Attitude-Behaviour
- ↳ Economic Self-Interest

# Attitude- Behaviour

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☞ Attitudes = Behaviour

☞ Little Connection





# Attitude- Behaviour

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- Energy Efficiency Workshop
- Attitudes and Knowledge
- Evaluation
  - 1 of 40 Lowered HHW
  - 2 of 40 Installed Wrap
  - 8 of 40 Installed Showerhead

# Economic Self-Interest

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- Residential Cons. Service
- Gas & Electric Utilities
  - Audits, Loans, Contractors
- Evaluation
  - 6% Requested Audit
  - 50% Acted, Savings 2-3%
  - 30% Waiting List Control

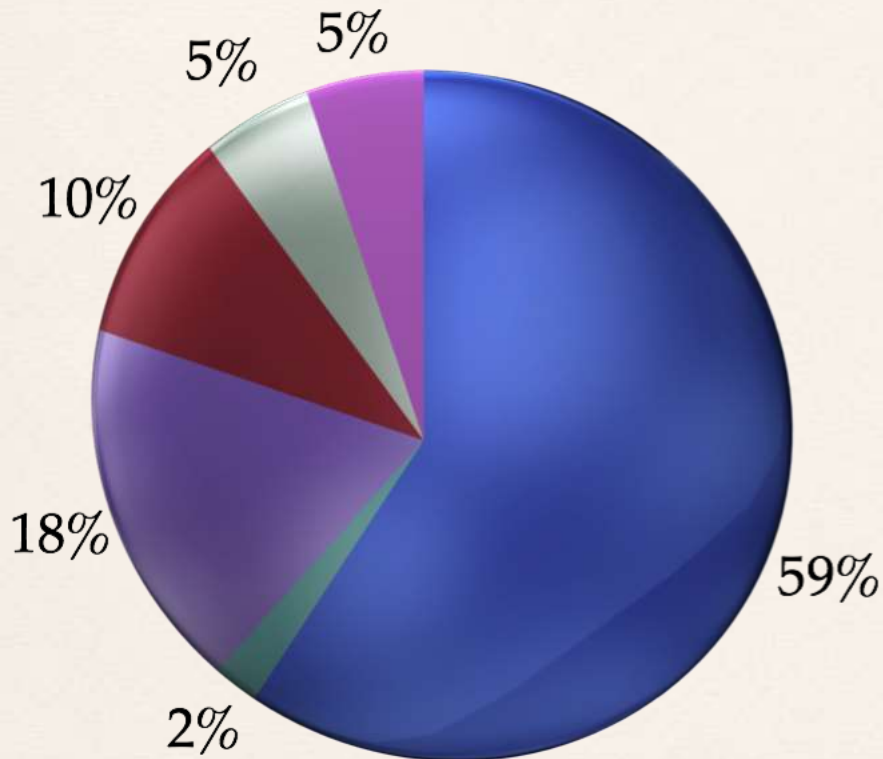




# What is Community-based Social Marketing?

- A methodology that utilizes social marketing and environmental psychology to change behaviors
- Key elements are: 1) selecting behaviors, 2) identifying barriers & benefits, 3) developing strategies, 4) conducting a pilot, and 5) broad-scale implementation

# Selecting Behaviors



Household Energy Use 2006<sup>1</sup>

- Space Heating
- Space Cooling
- Water Heating
- Appliances Major
- Appliances Minor
- Lighting

<sup>1</sup>Natural Resources Canada



# Selecting Behaviours

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- ☞ Non-Divisible
- ☞ End-State
- ☞ No Strategies





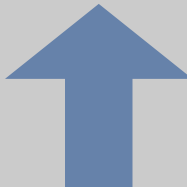

Rank	Behaviour	GHG (kg/ph/y)	Probability (0 - 4)	Penetration (0 -100%)	Weight
1	Purchase Green Power	8700	2.15	3%	18143
3	Cold Water Wash	450	3.09	38%	862
4	Increase Use of Clothes Line	200	3.07	8%	564
2	Install 10 CFLs	700	3.03	23%	1633
5	Install LF Showerhead	215	2.5	61%	209

# Uncovering Barriers & Benefits

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# Develop Strategy

Specific Behaviour	Barriers	Benefits
Encourage		
Discourage		

- Public commitments
- Case study:
  - **Using Commitment to Reduce Energy Consumption in Iowa City**
  - twenty minute home visits in pilot, explaining energy conservation strategies
  - Control group, plus one group public commitments and one group anonymous
  - Evaluation after one month revealed that public commitment had reduced energy consumption by 10-20 %. Furthermore, this behavior change was evident throughout the year their meters were monitored. In contrast, there was no significant energy reduction in the private commitment or control group.

- Social norming
- Case study:
  - Homes received door hangers with:
    - handwritten information about how much energy, in kWh/day, the household had used in the previous week
    - descriptive normative information about the actual energy consumption of the average household in their neighborhood during that same period
    - pre-printed suggestions for conserving energy (e.g. use fans instead of air conditioning).
    - Half got happy faces if they were better than average
    - If worse than average, half just got info., half got a hand-drawn sad face
    - Happy faces proved effective in motivating the better-than-average electricity users to maintain their low-consumption behavior, rather than drifting towards the behavioral standard
    - No difference found between the sad faces and standard info



# Piloting

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- ☞ Random Selection
- ☞ Random Assignment
- ☞ Measurement
  - ☞ Behaviour Change
  - ☞ Resource Use
  - ☞ Resource Quality

# Pilot Strategy



# Recommendations

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- 🌀 Tier Behaviours
- 🌀 Identify Barriers & Benefits
- 🌀 Pilot Strategies
- 🌀 Develop Turnkey Resources
- 🌀 Overarching Vision





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